

Konica

SERVICE MANUAL

Model DF-314

SECOND EDITION

NOVEMBER 2000

CSM-DF314

KONICA BUSINESS TECHNOLOGIES, INC.

DF-314

SERVICE MANUAL

NOVEMBER 2000

SECOND EDITION

IMPORTANT NOTICE

Because of the possible hazards to an inexperienced person servicing this equipment, as well as the risk of damage to the equipment, Konica Business Technologies strongly recommends that all servicing be performed by Konica-trained service technicians only.

Changes may have been made to this equipment to improve its performance after this service manual was printed. Accordingly, Konica Business Technologies, Inc., makes no representations or warranties, either expressed or implied, that the information contained in this service manual is complete or accurate. It is understood that the user of this manual must assume all risks or personal injury and/or damage to the equipment while servicing the equipment for which this service manual is intended.

Corporate Publications Department

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SAFETY PRECAUTIONS

Installation Environment

Safety considerations usually are directed toward machine design and the possibility of human error. In addition, the environment in which a machine is operated must not be overlooked as a potential safety hazard.

Most electrical equipment is safe when installed in a normal environment. However, if the environment is different from what most people consider to be normal, it is conceivable that the combination of the machine and the room air could present a hazardous combination. This is because heat (such as from fusing units) and electrical arcs (which can occur inside switches) have the ability to ignite flammable substances, including air.

When installing a machine, check to see if there is anything nearby which suggests that a potential hazard might exist. For example, a laboratory might use organic compounds which, when they evaporate, make the room air volatile. Potentially dangerous conditions might be seen or smelled. *The presence of substances such as cleaners, paint thinners, gasoline, alcohol, solvents, explosives, or similar items should be cause for concern.*

If conditions such as these exist, take appropriate action, such as one of the following suggestions.

- Determine that the environment is controlled (such as through the use of an exhaust hood) so that an offending substance or its fumes cannot reach the machine.
- Remove the offending substance.
- Install the machine in a different location.

The specific remedy will vary from site to site, but the principles remain the same. To avoid the risk of injury or damage, be alert for changes in the environment when performing subsequent service on any machine, and take appropriate action.

Unauthorized Modifications

Konica copiers have gained a reputation for being reliable products. This has been attained by a combination of outstanding design and a knowledgeable service force.

The design of the copier is extremely important. It is the design process that determines tolerances and *safety margins* for mechanical, electrical, and electronic aspects. It is not reasonable to expect individuals not involved in product engineering to know what

effect may be caused by altering any aspect of the machine's design. Such changes have the potential of degrading product performance and reducing safety margins.

For these reasons, *installation of any modification not specifically authorized by Konica Business Machines U.S.A., Inc., is strictly prohibited.*

The following list of prohibited actions is not all-inclusive, but demonstrates the intent of this policy.

- Using an extension cord or any unauthorized power cord adapter.
- Installing any fuse whose rating and physical size differs from that originally installed.
- Using wire, paper clips, solder, etc., to replace or eliminate any fuse (including temperature fuses).
- Removing (except for replacement) any air filter.
- Defeating the operation of relays by any means (such as wedging paper between contacts).
- Causing the machine to operate in a fashion other than as it was designed.
- Making any change which might have a chance of defeating built-in safety features.
- Using any unspecified replacement parts.

General Safety Guidelines

This copier has been examined in accordance with the laws pertaining to various product safety regulations prior to leaving the manufacturing facility to protect the operators and service personnel from injury. However, as with any operating device, components will break down through the wear-and-tear of everyday use, as will additional safety discrepancies be discovered. For this reason, it is important that the technician periodically performs safety checks on the copier to maintain optimum reliability and safety.

The following checks, not all-inclusive, should be made during each service call:

CAUTION: Avoid injury. Ensure that the copier is disconnected from its power source before continuing.

- Look for sharp edges, burrs, and damage on all external covers and copier frame.
- Inspect all cover hinges for wear (loose or broken).
- Inspect cables for wear, frays, or pinched areas.

- Ensure that the power cord insulation is not damaged (no exposed electrical conductors).
- Ensure that the power cord is properly mounted to the frame by cord clamps.
- Check the continuity from the round lug (GND) of the power cord to the frame of the copier – ensure continuity. An improperly grounded machine can cause an electrically-charged machine frame.

Safeguards During Service Calls

Confirm that all screws, parts, and wiring which are removed during maintenance are installed in their original positions.

- When disconnecting connectors, do not pull the wiring, particularly on AC line wiring and high voltage parts.
- Do not route the power cord where it is likely to be stepped on or crushed.
- Carefully remove all toner and dirt adhering to any electrical units or electrodes.
- After part replacement or repair work, route the wiring in such a way that it does not contact any burrs or sharp edges.
- Do not make any adjustments outside of the specified range.

Applying Isopropyl Alcohol

Care should be exercised when using isopropyl alcohol, due to its flammability. When using alcohol to clean parts, observe the following precautions:

- Remove power from the equipment.
- Use alcohol in small quantities to avoid spillage or puddling. Any spillage should be cleaned up with rags and disposed of properly.
- Be sure that there is adequate ventilation.
- Allow a surface which has been in contact with alcohol to dry for a few minutes to ensure that the alcohol has evaporated completely before applying power or installing covers.

Summary

It is the responsibility of every technician to use professional skills when servicing Konica products. There are no short cuts to high-quality service. Each copier must be thoroughly inspected with respect to safety considerations as part of every routine service call. The operability of the copier, and more importantly, the safety of those who operate or service the copier, are directly dependent upon the conscientious effort of each and every technician.

Remember...when performing service calls, use good judgement (have a watchful eye) to identify safety hazards or potential safety hazards that may be present, and correct these problem areas as they are identified -- the safety of those who operate the copier as well as those who service the copier depend on it!

DF-314 PRODUCT SPECIFICATIONS

Type

Type: Sheet-through type reversible DF

Functions

Originals Size: 11x17, 8.5x14, 8x13, 8.5x11, 8.5x11R, 5.5x8.5, 5.5x8.5R

- All sizes are detected automatically.
- Mixing of original size possible.

Original Type

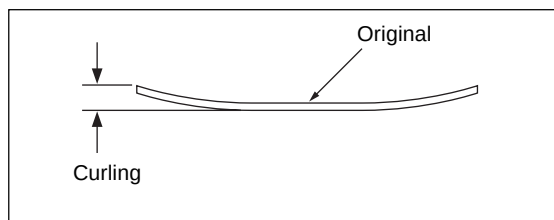
Plain Original: 10 lb. - 35 lb. fine quality original

Special Original: Original feed and conveyance ability may be inferior those of 10 lb. to 35 lb. fine quality original.

The following types of original cannot be used:

- OHP film
- Blueprint masters
- Offset masters
- Bonded original

Original Curling: 10mm maximum (10 lb. to 35 lb. high-quality paper)



Maximum Number of Stacked Originals:

50 sheets maximum (22 lb.)

Original Scan Speed (Copies Per Minute)

Mode	Original size	Feed speed
Single sided Original → Single sided Copy	8.5x11	30
Double sided Original → Double sided Copy	8.5x11	18

Original Feed Layout:

Face-up placement, center standard

Original image read Position:

At the slit glass section

Machine data

Power Source: DC24V/5V (supplied from the main body)

Maximum Power Consumption:

Maximum 100VA

Weight: Approximately 24 lb.

(including about 2.5 lb. for platen)

Machine Dimensions: Length 22.7 in

Depth 19.6 in.

Height 3.9 in.

Maintenance

Maintenance: Same as the main unit

Machine environment

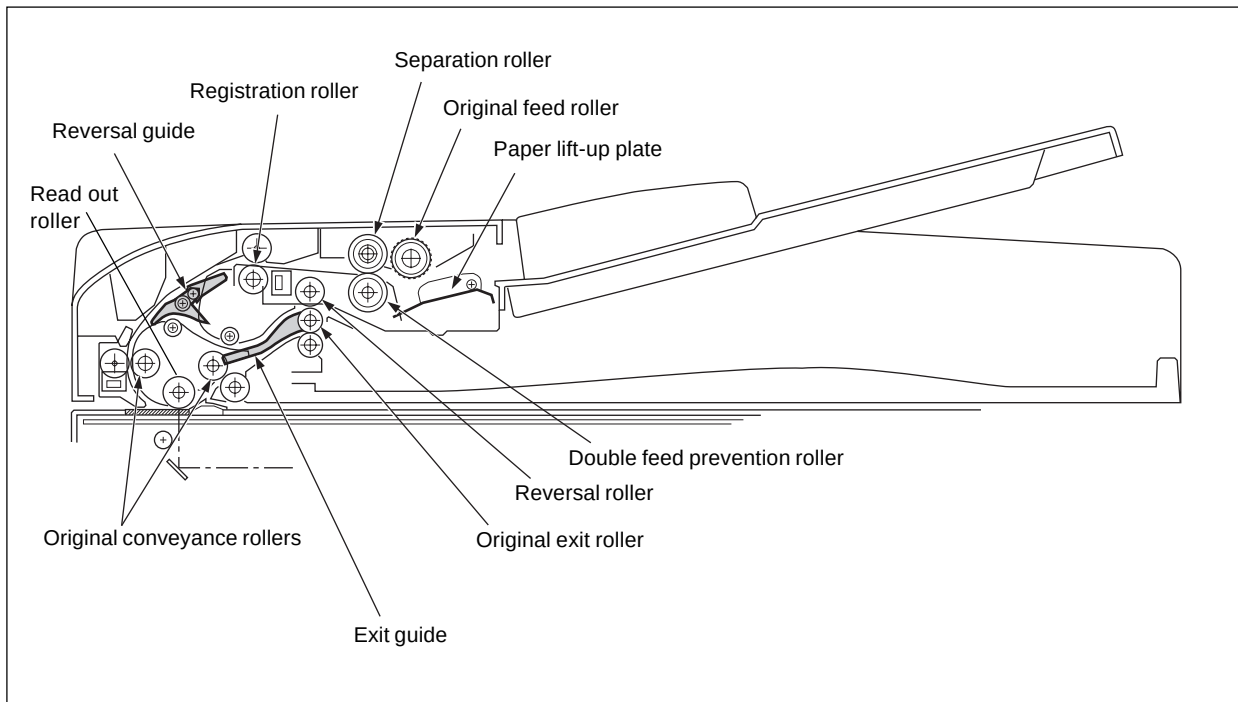
Temperature: 50 to 86°F

Humidity: 10 to 80%RH

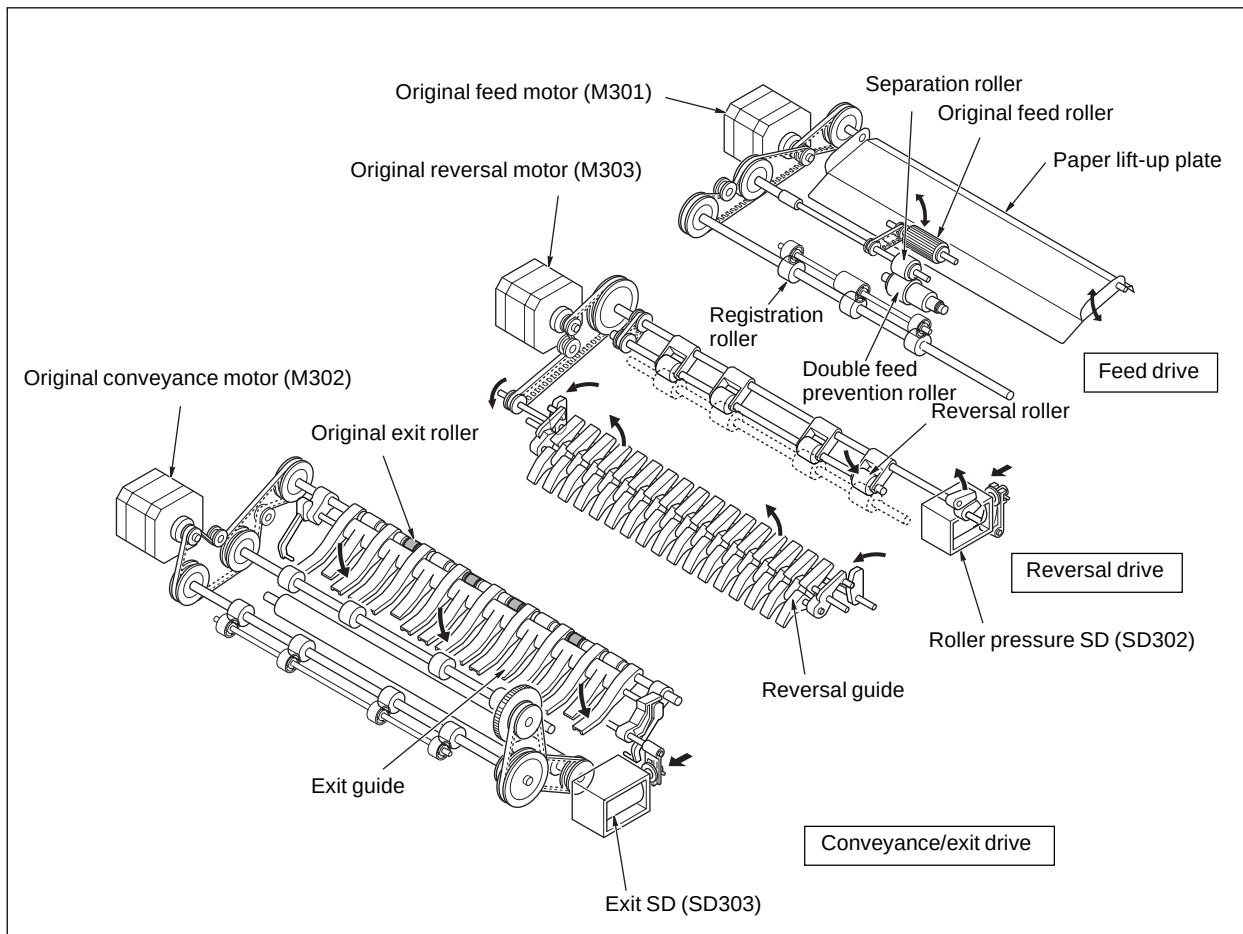
(below condensation-forming conditions)

Caution: The contents of this service manual are subject to change without notice.

CENTER CROSS-SECTIONAL DIAGRAM

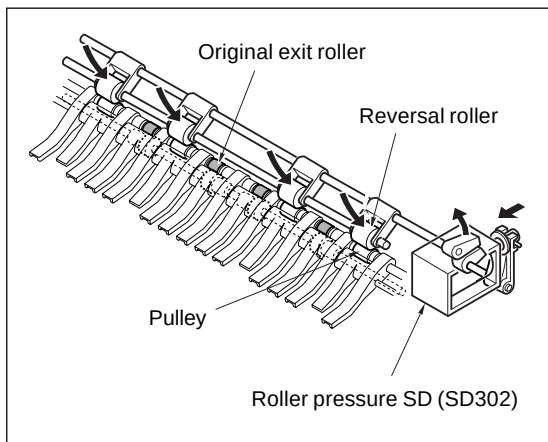


DRIVE SYSTEM DIAGRAM



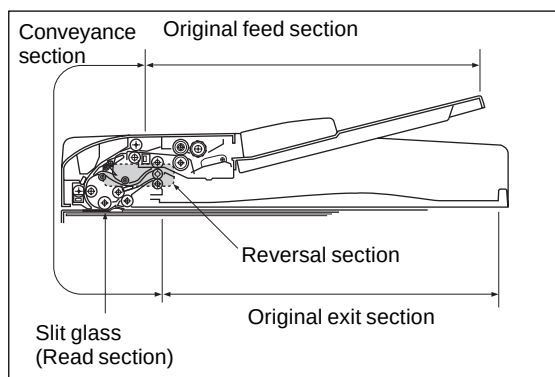
*Reversal and Exit Rollers

A reversal roller pulley is attached to the original exit roller shaft. The reversal roller conveys the original through pressure being applied on the pulley by the roller pressure SD.



ORIGINAL CONVEYANCE PROCESS

As illustrated below, the DF-314 is made up of a original feed section, conveyance section, original exit section and reversal section.



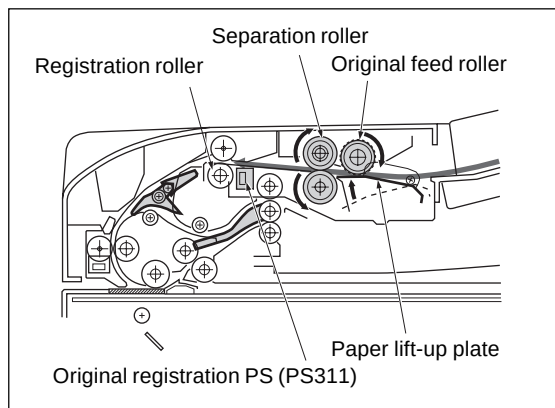
With the originals set face-up on the original feed tray, they are fed from the topmost original. Rather than being conveyed to an original glass surface, the originals that are fed in and read when they pass a slit glass placed in the conveyance path.

There are 3 modes in the DF-314 operation mode, single-side original copy mode, double-side original copy mode, and mixed original copy mode, and the conveyance path differs according to each mode.

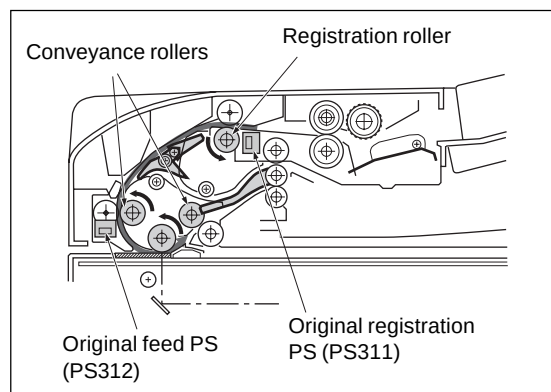
Single-Side Original Copy Mode

(Single-side to single-side copy, single-side to double-side copy)

The original that has been set in the paper feed tray is lifted by the paper lift-up plate so it comes into contact with the original feed roller. The original feed roller and the separation roller pre-feed to the position where P311 (original registration PS) turns on.

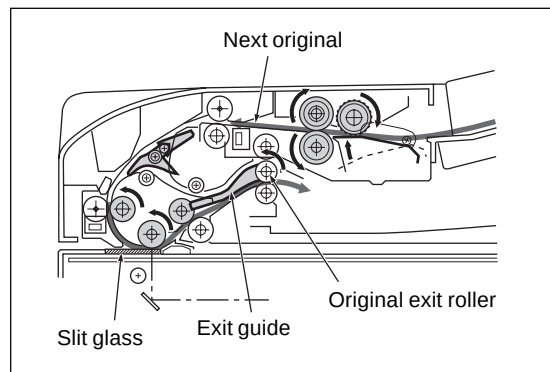


When PS311 turns ON, the original is re-fed by the registration roller and conveyed to the original conveyance roller. The original conveyance roller conveys the original to the position where PS312 (original feed PS) turns ON.



The conveyance roller turns, and scanning starts. If there is another original waiting, it is pre-fed at this point.

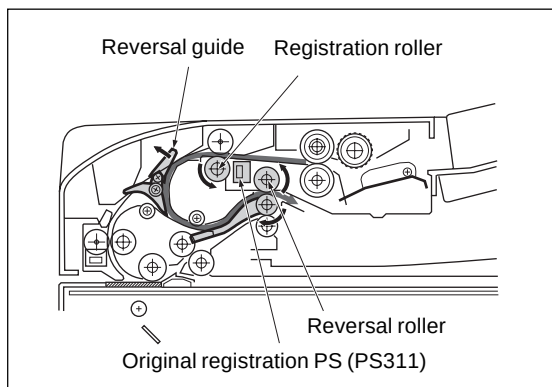
The scanning of the original is conveyed out when the original passes over the slit glass. The original which has been read is exited to the original exit tray by the original exit roller with the exit SD OFF (i.e. with the exit guide raised).



Double-side Original Copy Mode

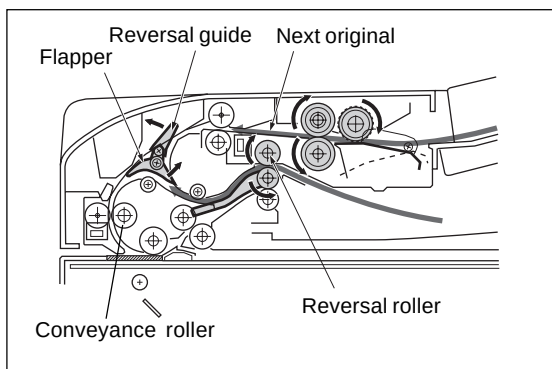
(Double-side to single-side copy, double-side to double-side copy)

The original set in the original feed tray is pre-fed to the position where PS311 (original registration PS) turns ON by the original feed roller and the separation roller. When PS311 turns ON, the reversal guide opens, the registration roller conveys the original to the reversal section, and the reversal roller conveys the original into the interior of the reversal section.

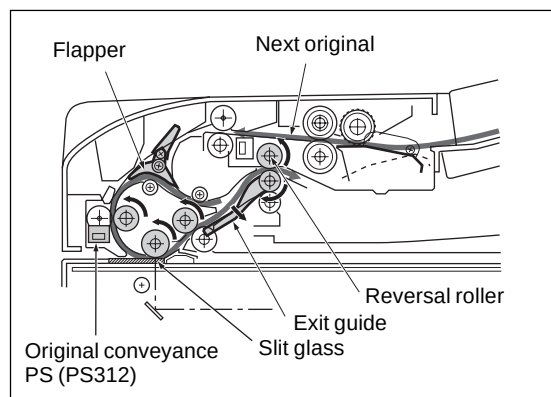


After the specified period from when PS311 detects the training edge of the original and goes OFF, the original is conveyed to the stop position at the front edge of the reversal guide. As the original has been reversed at this point, the reversal roller is made to rotate in reverse and it conveys the original to the original conveyance roller. If there is another original waiting, it is pre-fed at this timing.

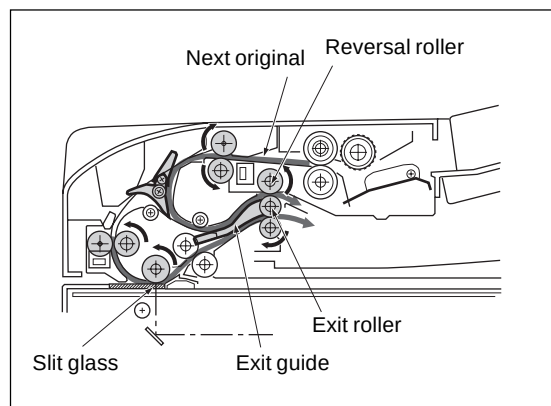
The original conveyance roller conveys the original to the position where PS312 turns ON and the reading of the original back side starts.



The exit SD comes ON (the exit guide is lowered) when scanning of the rear side of the original begins, and the original is again conveyed to the reversal roller. When PS312 detects the rear edge of the original and turns OFF, the original is conveyed as far as the stop position in front of the reversal gate by the timer. The original has been reversed once again by this point so is conveyed to the original conveyance roller. The original conveyance roller conveys the original and reading of the original face side starts.



The original which has been read is exited to the original exit tray by the original exit roller with the exit SD OFF (i.e. with the paper exit guide raised). If there is another original, it is conveyed to the reversal section at this point.



Mixed Original Copy Mode

The mixed original copy mode supports both same-series originals and different series originals, but as size detection is performed in PS311 ON time, size detection is performed before reading.

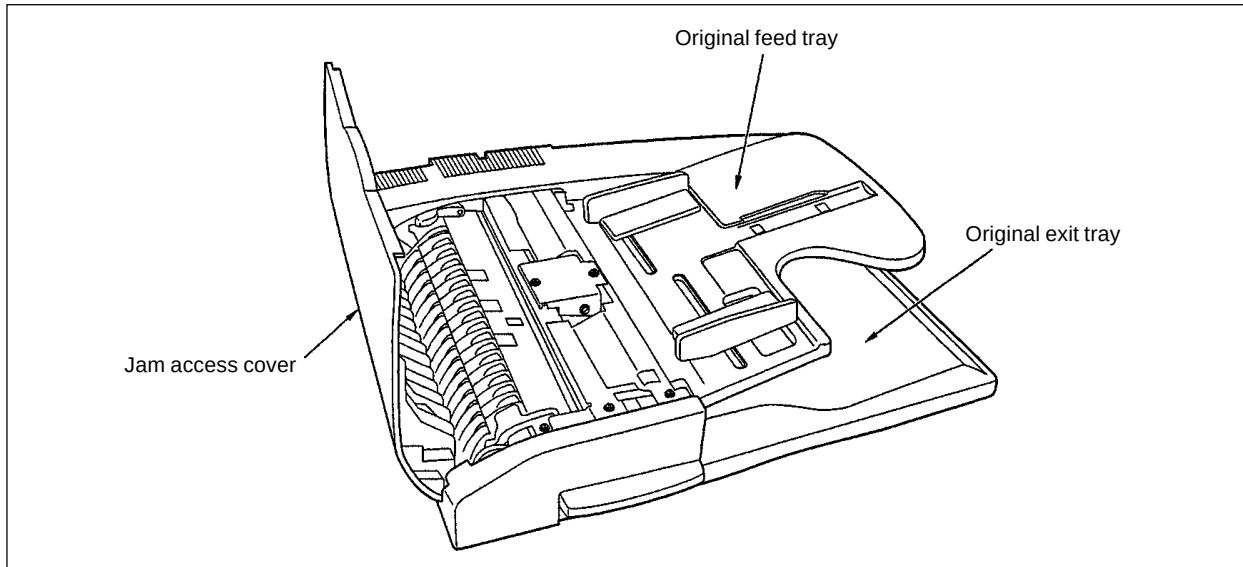
After the size of the original is detected, the original stops at the reversal position. Subsequently, operation is the same as that of the two-sided copy mode.

Refer to "ORIGINAL FEED/REVERSAL/ORIGINAL EXIT SECTION/Original size detection control" for size detection operation.

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EXTERNAL SECTION

Composition

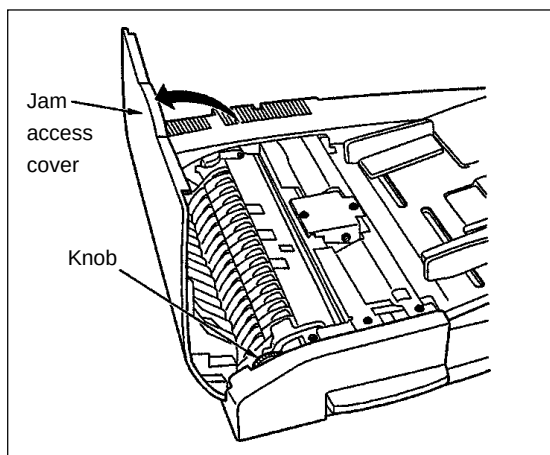


Mechanisms

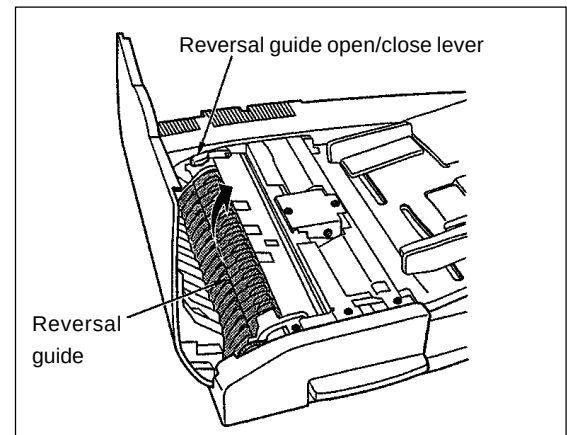
Mechanism	System
Jam release*	Jam access cover Reversal guide open/close lever RADF Main body open/close Knob Exit-guide open/close lever Platen separation lever

* Jam removal

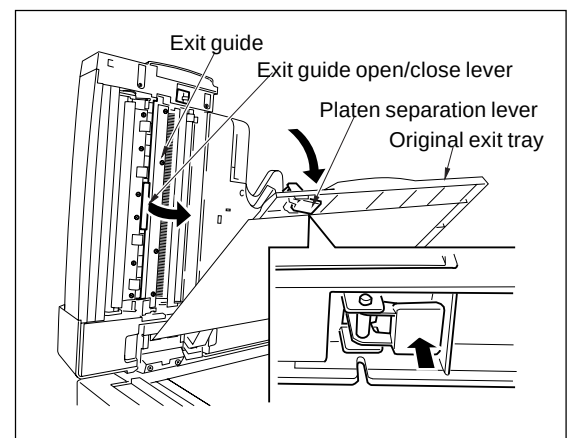
If a jam occurs at the original feed, open the Jam access cover and turning the knob closer to you withdraw the sheet.



If a jam occurs in the reversal section, open the reversal guide with the reversal guide open/close lever and withdraw the sheet.

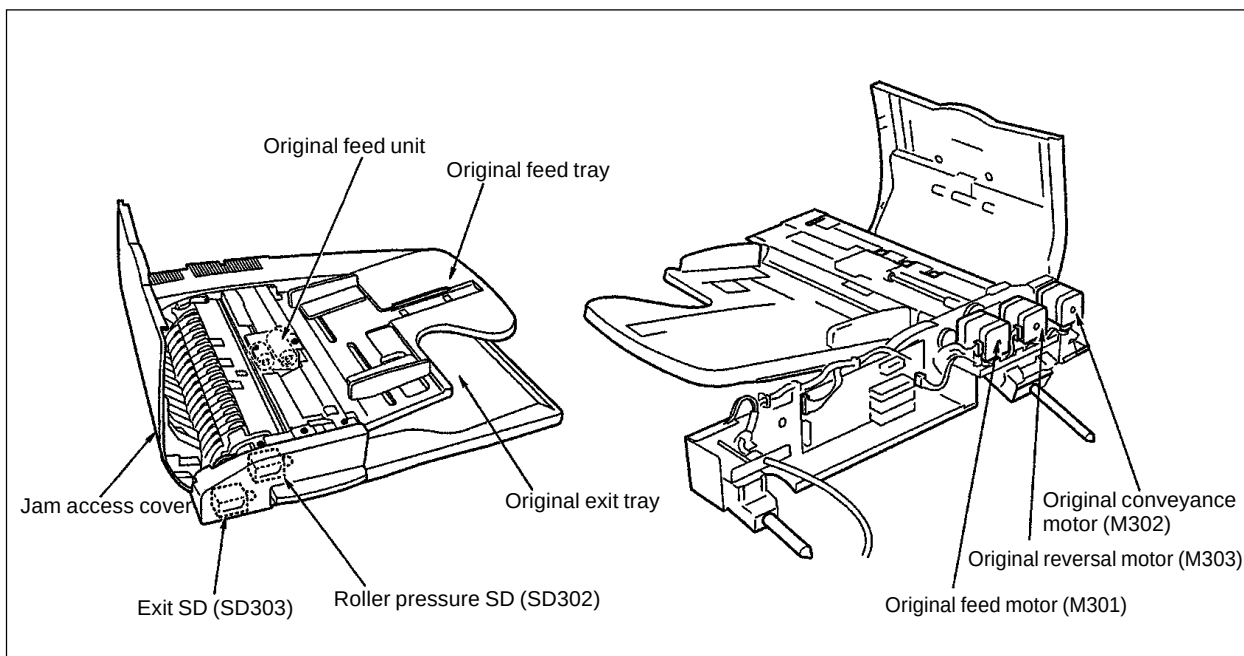


If a jam occurs in the conveyance section, open the exit tray (using the platen separation lever) and the exit guide (using the exit-guide open/close lever) and withdraw the sheet.



ORIGINAL FEED/REVERSAL/ORIGINAL EXIT SECTION

Composition

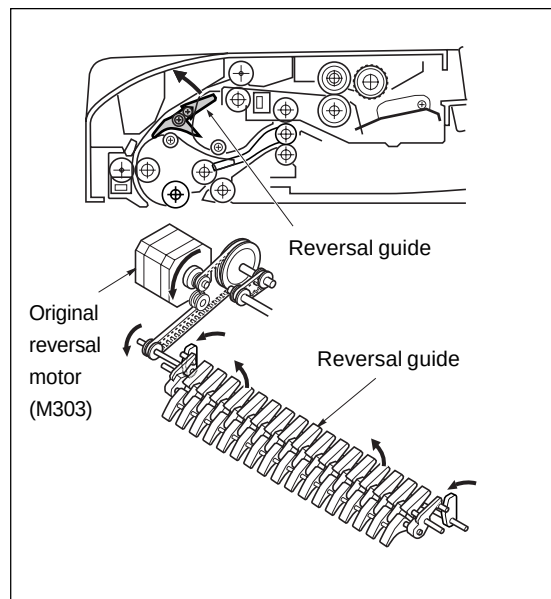


Mechanisms

Mechanism	System
Original feed	Feed roller
Double feed prevention	Separation roller Double feed prevention Roller
Original conveyance	Original conveyance rollers
Original reverse and feed *1	Reversal guide
Original exit path section *2	Original exit guide

*1: Reversed original feed

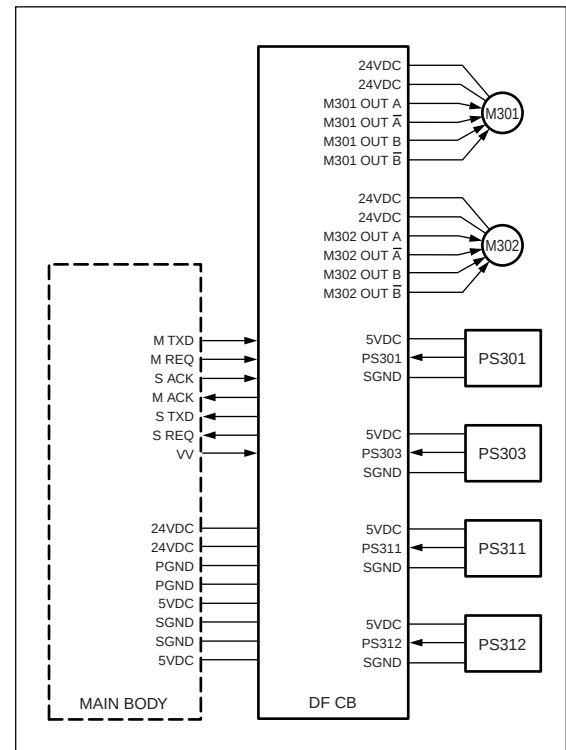
During double-side copying, in order to reverse the original the paper feed path is switched by the reversal guide, the paper is conveyed to the reverse mechanism and is reversed.



Original Feed/Conveyance/Scan Control

Diagram illustrating the removal of the Exit SD (SD303) and the Exit guide.

The top part of the diagram shows the Exit guide being removed from the main unit. The bottom part shows the Exit SD (SD303) being removed from the Exit guide.



Original feed is achieved by the transmission of the M301(original feed motor) drive power to the original feed roller, separation roller and registration roller. Original conveyance is achieved by the transmission of the M302 (original conveyance motor) drive power to the original conveyance roller.

The M301 and M302 are controlled by the DFCB (RADF control board).

1. Operation**a. Original feed**

Original feed is started by the transmission of the M301 drive power to the original feed roller, separation roller and paper lift-up plate.

b. 1st original pre-feed

When the copy button is pressed, the M301 starts original pre-feed, and when the conveyed original arrives at PS311, M301 stops temporarily after a specified time. M301 then rotates in reverse, turning the registration roller so that feeding starts again. The original passes PS311, so that PS311 turns OFF. A predetermined time interval after PS311 turns OFF, M301 also turns OFF.

c. 2nd original pre-feed

When there is still an original in the original feed tray, M301 starts after a specified time after PS311 has turned OFF, and starts the pre-feed from after the second sheet. The original is conveyed in the same way as in the 1st. original pre-feed.

d. Scanning operation (except last original)

When the original arrives at PS311, M302 starts after a specified time has elapsed and the original is conveyed to the read section.

Scanning of the original is achieved when the original passes over the surface of the slit glass of the main body optical section.

When the original arrives at PS312, scanning is started after a specified time has elapsed, and when PS312 turns OFF after the original has passed, scanning is stopped after the lapse of a fixed period of time.

e. Scanning operation (last original)

During the scanning operation, when PS301(no original detect PS) turns OFF, the original currently being scanned is judged to be the last original. When the last original has passed PS311, M301 turns OFF after the lapse of a fixed period of time, and when the original has passed PS303 (original exit PS), M302 turns OFF after a specified time.

2. Signals**a. Input signals****(1) PS301(PS301 -> DF CB)**

Original feed tray no-paper detection signal

[L] : Original

[H] : No original

(2) PS303(PS303 -> DF CB)

Original exit section original detection signal

[L] : No original

[H] : Original

(3) PS311(PS311 -> DF CB)

Original conveyance roller entrance original detection signal

[L] : No original

[H] : Original

(4) PS312(PS312 -> DF CB)

Original detection signal from detector in front of scan position

[L] : No original

[H] : Original

(5) M TXD (MAIN BODY -> DF CB)

Serial data line; informs RADF of the operating state of the main body's CB

(6) M REQ (MAIN BODY -> DF CB)

Transmission request signal from main body to RADF

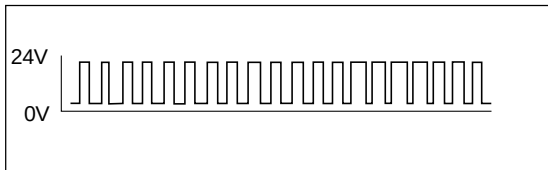
(7) S ACK (MAIN BODY -> DF CB)

Transmission OK signal from main body to RADF

b. Output signals

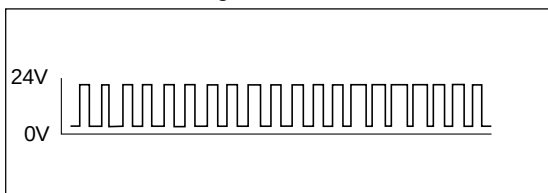
- (1) M301 OUT A, M301 OUT $\bar{A}$, M301 OUT B, M301 OUT $\bar{B}$ (DF CB -> M301)

M301 drive control signal

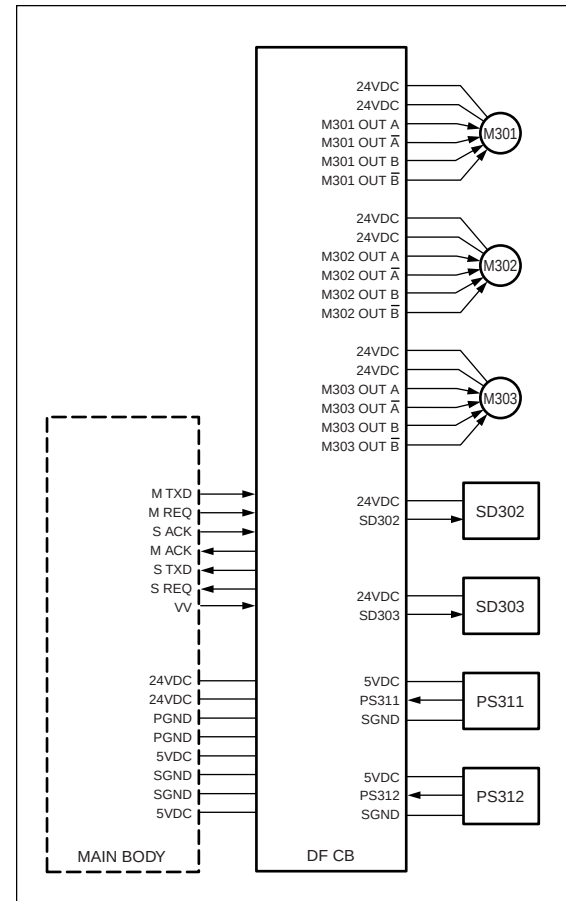


- (2) M302 OUT A, M302 OUT $\bar{A}$, M302 OUT B, M302 OUT $\bar{B}$ (DF CB -> M302)

M302 drive control signal



- (3) M ACK (DF CB -> MAIN BODY)
Transmission OK signal from RADF to main body
- (4) S TXD (DF CB -> MAIN BODY)
Serial data line; informs the main body's CB of the RADF operating state
- (5) S REQ (DF CB -> MAIN BODY)
Transmission request signal from RADF to main body.

Original Exit/Reversal and Conveyance Control

The exit guide used in exit path switching is driven by the SD303 (exit SD).

Reversal conveyance drive in double-side copy mode is performed by the M303 (original reversal motor). The reversal roller pressure/freeing used in reversal original feed is performed by the SD 302 (roller pressure SD).

M303, SD302 and SD303 are controlled by the DF CB (RADF control board).

1. Operation

a. Original exit operation

During single side copying and face side copying in double-side copying, the exit guide is raised because SD303 is OFF. For this reason, an original which has been read is conveyed to the exit section.

b. Reversal original exit operation

During back side copying in double side copying, the original is conveyed to the scanning section by reverse rotation of M303 and normal rotation of M302. When PS312 turns ON, SD302 turns OFF, and reversal roller paper pressure conveys the freed original to the reversal section.

c. Reversal original feed operation

After PS312 has detected the rear edge of the original, SD302 turns ON after a specified time has elapsed and the reversal roller applies pressure (seizes, pinches) to the original. After that, M303 stops, but then immediately reverses and starts the original feed operation of the original face side scan.

d. Pre-feed operation of next original when reading back side of original

PS311 turns OFF once the first original has passed, and after a specified period of time has elapsed, starts the pre-feed operation for the 2nd. original. After the elapse of a specified time after the 2nd. original has arrived at PS311, M301 (original feed motor) stops.

e. Overlap control

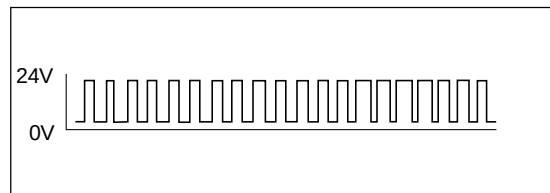
When scanning of the back side of the first original sheet has been completed and the leading edge of the original fed from the reversal section reaches PS312, M301 turns ON and feeding of the second original starts. At this time, the SD302 goes OFF, causing the pressure on the reversal roller and the paper exit roller to be released. This enables the first and second originals to pass over each other in opposite directions in the reversal unit.

2. Signals

a. Output signals

- (1) M301 OUT A, M301 OUT $\bar{A}$, M301 OUT B, M301 OUT $\bar{B}$ (DF CB -> M301)

M301 drive control signal



- (2) SD302 (DF CB -> SD302)

SD302 drive control signal

[L] : ON

[H] : OFF

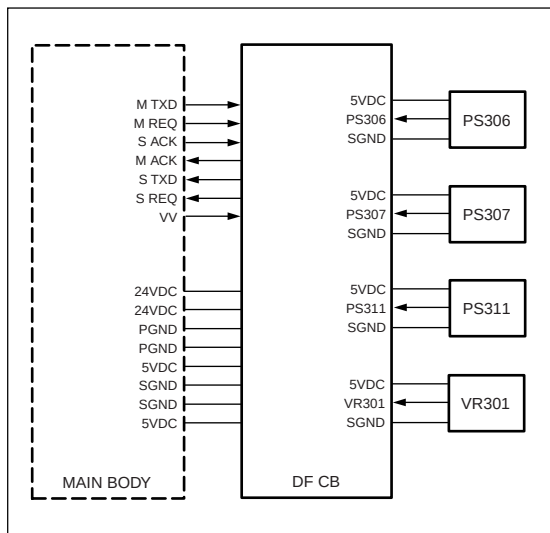
- (3) SD303 (DF CB -> SD303)

SD303 drive control signal

[L] : ON

[H] : OFF

Original Size Detection Control



Size detection on an original set in the original feed tray is performed by PS306 (original size detect PS1), PS307 (original size detect PS2), and VR301 (size detect VR).

Note that the DF CB includes internal nonvolatile memory that stores timing data, size-detection reference values, and other such data.

1. Operation

a. Normal copy mode

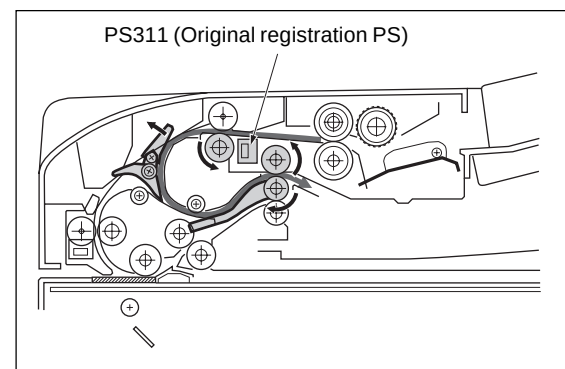
The DF CB detects the original size when the signals described below combine.

- (1) Drum axis direction size detection
VR301 resistance value changes in the position where the guide plate contacts VR301. The width of the original is detected by the resistance value.
- (2) Size detection in original feed direction
The length of the original is detected by the ON/OFF states of PS306 and PS307.

b. Original size detection in mixed-original modes and Z-fold-original modes (1st sheet)

- (1) Drum axis direction size detection
The width of the maximum sized original being mixed-loaded is detected by the position of the VR301 guide plate.
- (2) Size detection in original feed direction
Original feed direction size is detected during PS311 ON time (the time taken by the original to pass PS311).
- (3) Operation of size detection in original feed direction

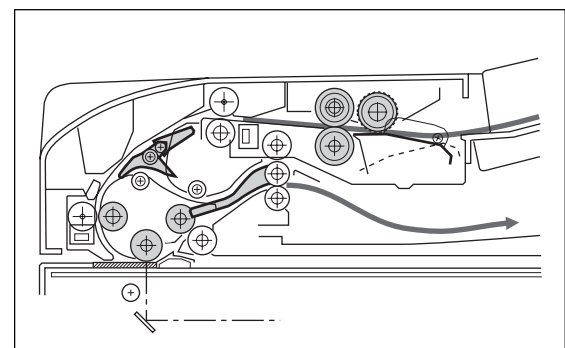
When original re-feed is started by the registration roller, when a specified time has elapsed after PS311 turning ON, M303 (original reversal motor) turns ON and conveys the original to the reversal section.



Conveyance to the scanning section is performed by M303 reverse rotation.

Conveyance or scanning thereafter for both single and double-sided originals is performed by the same operation as for double-side copy mode. However in single-side copying, the back side of the original passes the scanning section without being scanned and is conveyed to the reverse section.

Original size detection operation after the 2nd. original starts after the completion of the exit of the first original.



c. Allowed size combination

(△: same size, ○: same series, ⊙: different series,

×: no mixed loading, —: not supported)

(1) AB series

Other originals	Standard originals (the maximum original size detected by the guide plate)							
	A3	A4	B4	B5	A4R	A5	B5R	A5R
A3	△	○	—	—	—	—	—	—
A4	○	△	—	—	—	—	—	—
B4	⊙	⊙	△	○	—	—	—	—
B5	⊙	⊙	○	△	—	—	—	—
A4R	⊙	⊙	⊙	⊙	△	○	—	—
A5	⊙	⊙	⊙	⊙	○	△	—	—
B5R	×	×	⊙	⊙	⊙	⊙	△	—
A5R	×	×	×	×	×	×	×	△

(2) Inch series

Other originals	Standard originals (the maximum original size detected by the guide plate)					
	11x17	8.5x11	8.5x14	8.5x11R	8.5x5.5	8.5x5.5R
11 x 17	△	○	—	—	—	—
8.5 x 11	○	△	—	—	—	—
8.5 x 14	⊙	⊙	△	○	○	—
8.5 x 11R	⊙	⊙	○	△	○	—
8.5 x 5.5	⊙	⊙	○	○	△	—
8.5 x 5.5R	×	×	×	×	×	△

2. Signals**a. Input signals****(1) PS306 (PS306 -> DF CB)**

Detection of original's length

[1] : Original

[2] : No original

(2) PS307 (PS307 -> DF CB)

Detection of original's length

[1] : Original

[2] : No original

(3) VR301 (VR301 -> DF CB)

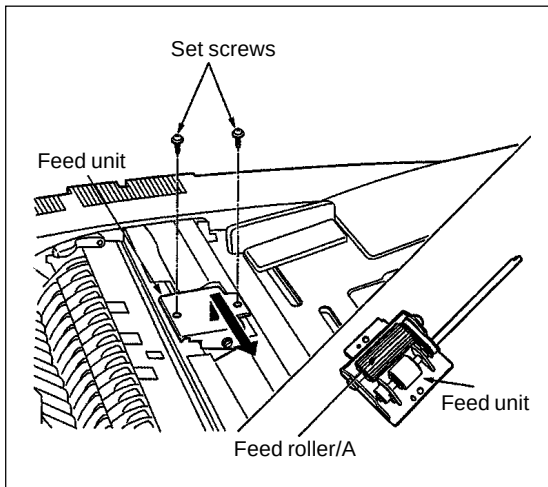
Detection of original's width

DISASSEMBLY/ASSEMBLY

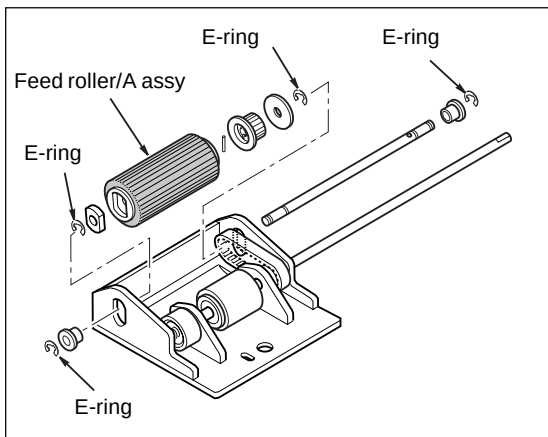
⚠ Caution: Make sure the power plug is taken out of the socket.

Replacing Feed Roller/A

- (1) Open jam access cover.
- (2) Take out the 2 fixed screws and lifting the feed unit lightly draw it forwards towards yourself and remove it.



- (3) Remove the E-rings on the ends of the paper-feed unit (one E-ring on each end), and remove the feed roller/A assy.
- (4) Remove feed roller/A from the bearing of the feed roller/A assy.

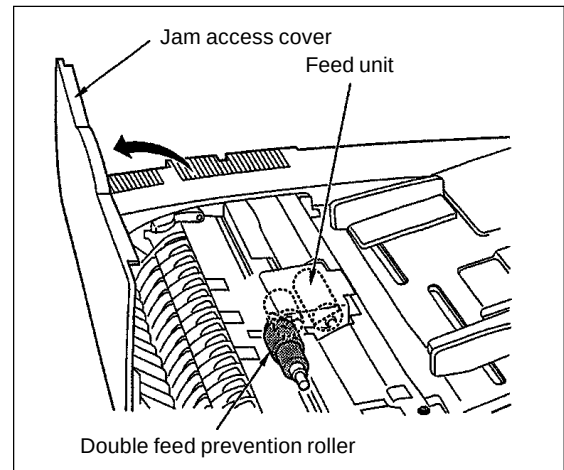


- (5) Install by reversing the removal procedure.

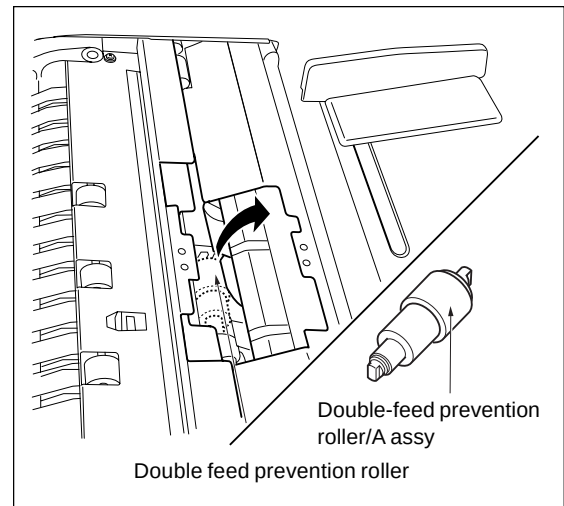
Caution: When installing the feed unit, insert the unit in order to fit the D cut side on the drive shaft in the coupling.

Replacing the Double-Feed Prevention Roller/A Assembly

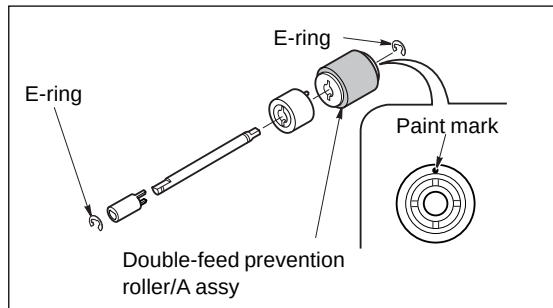
- (1) Open jam access cover.
- (2) Remove feed unit.



- (6) Remove double feed prevention roller.



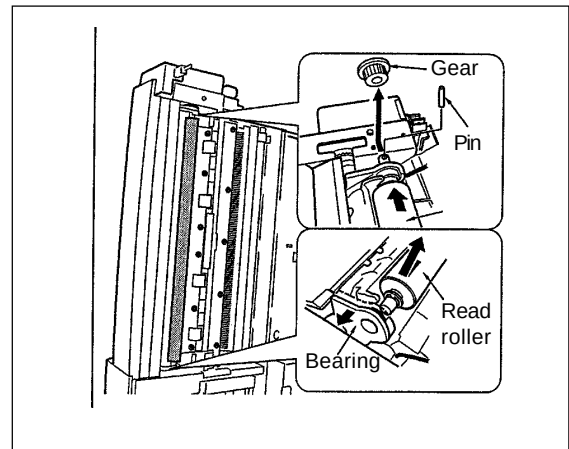
- (4) Remove the E-ring from the double-feed prevention roller/A Assy.
- (5) Pull out the double-feed prevention roller/A Assy.



- (6) Install by reversing the removal procedure.

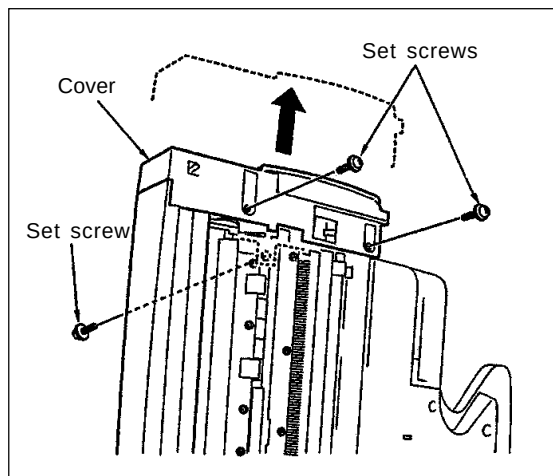
Caution: When installing the double-feed prevention roller, make sure you install it in the correct direction.

- (3) Move the rear roller upward, then take out the pin and remove the gear. Move the lower bearing, then pull out the shaft of the read roller.

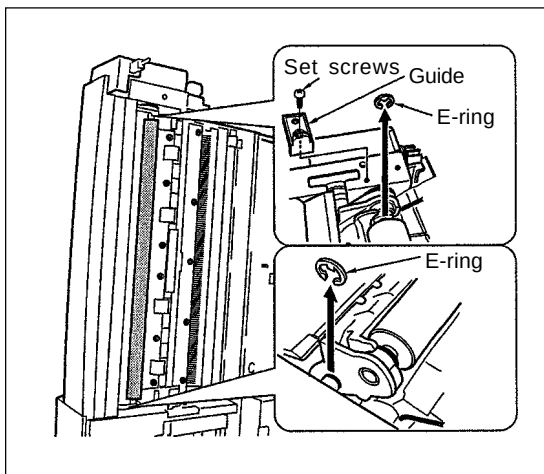


Replacing the Read Roller

- (1) Remove the 3 set screws, and remove the cover.



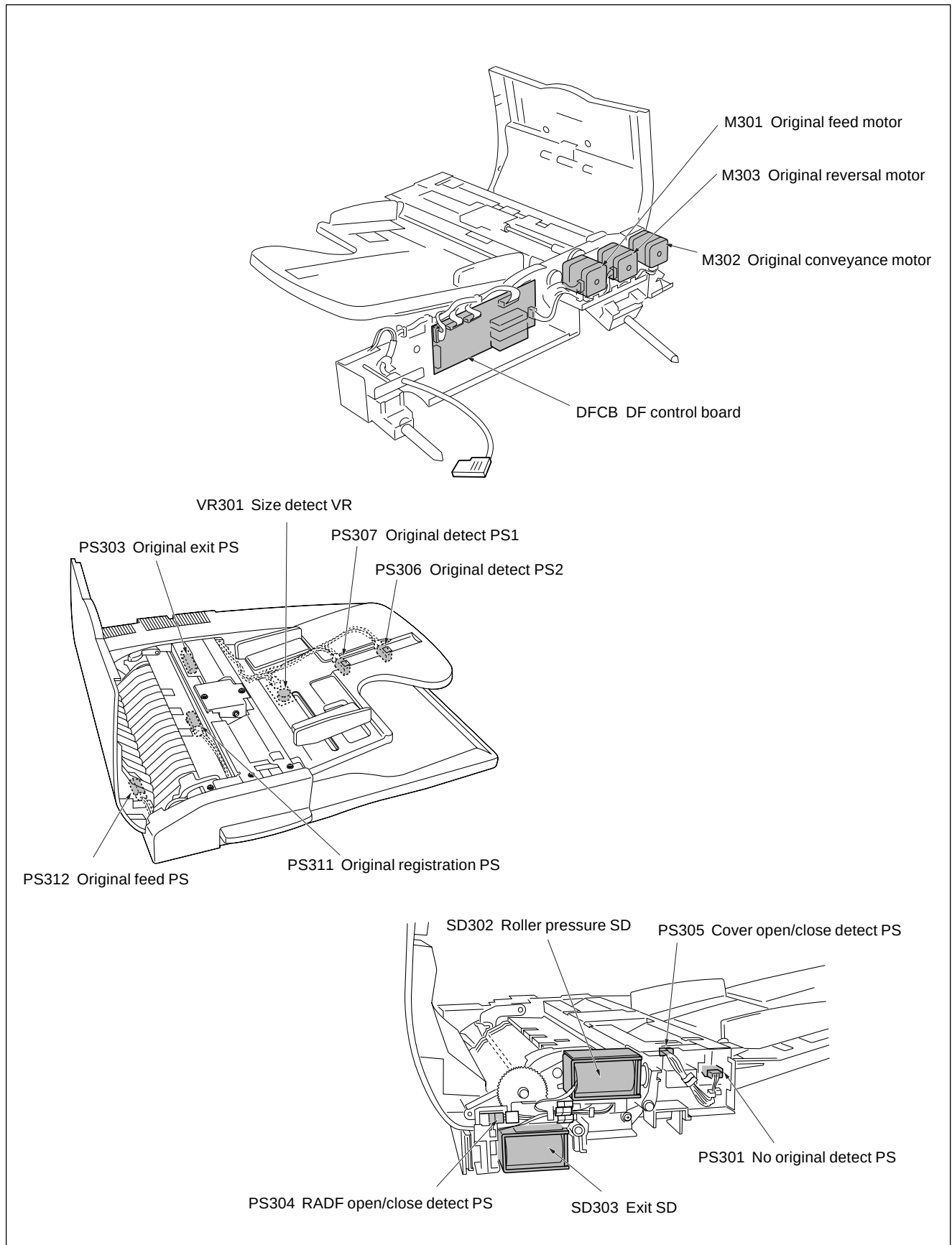
- (2) Remove the set screw, and remove the guide. Next, remove the e-ring at the top of the read roller and also the bearing at the bottom together with the e-ring securing it.



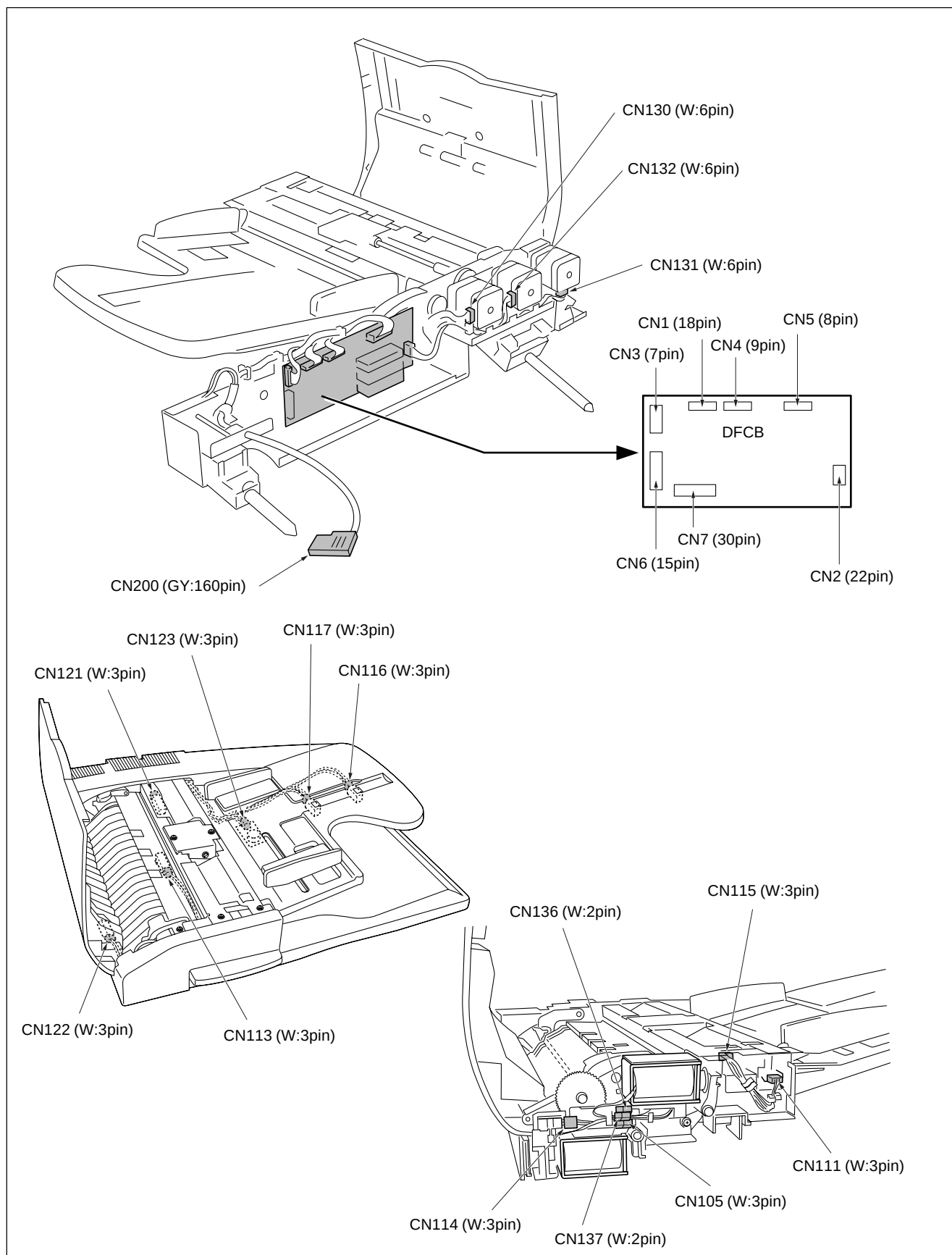
- (4) Reinstall the read roller in the opposite sequence to removal.

Caution: Use glass cleaner to clean the roller if it is dirty.

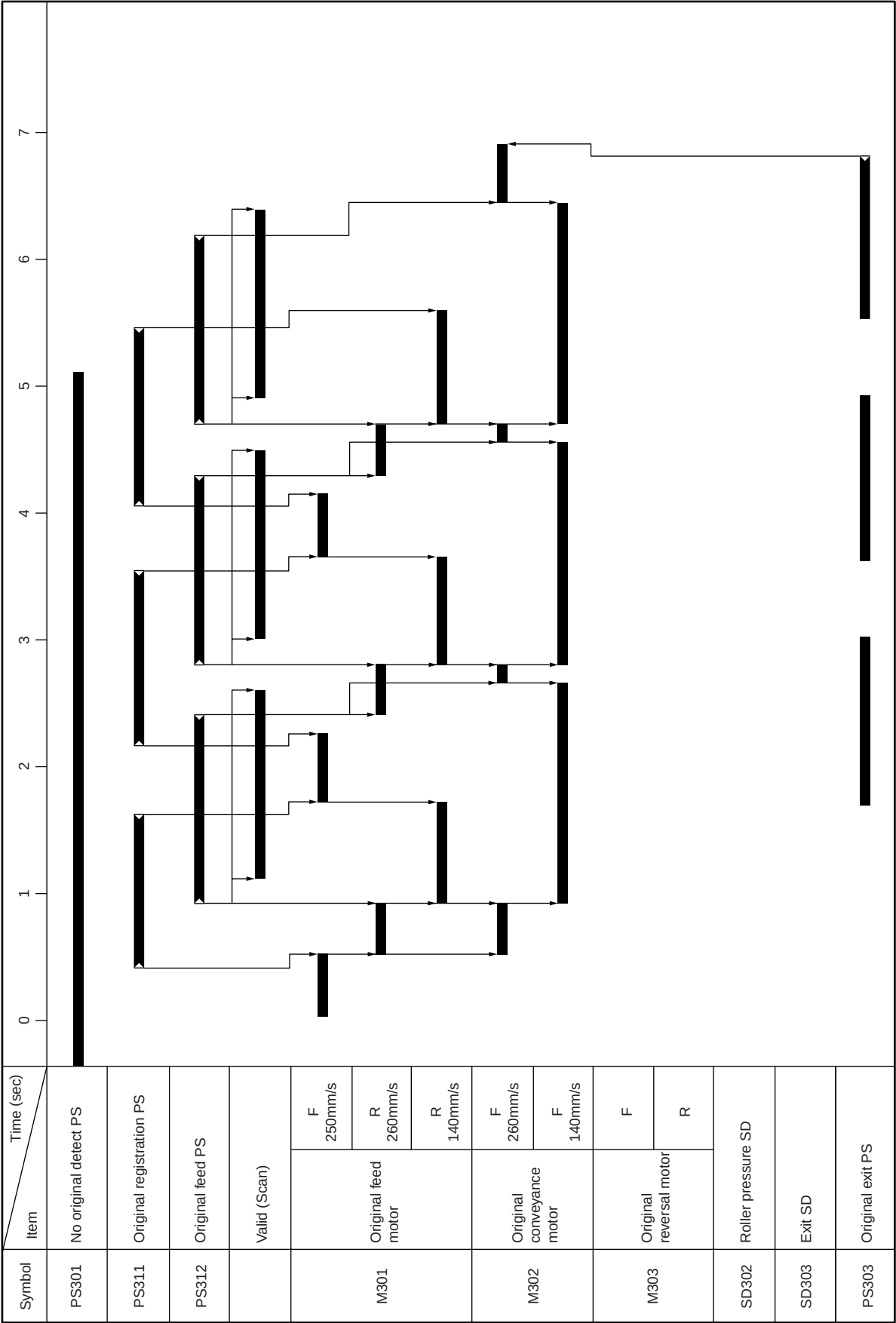
DF-314 ELECTRICAL PARTS LAYOUT DRAWING



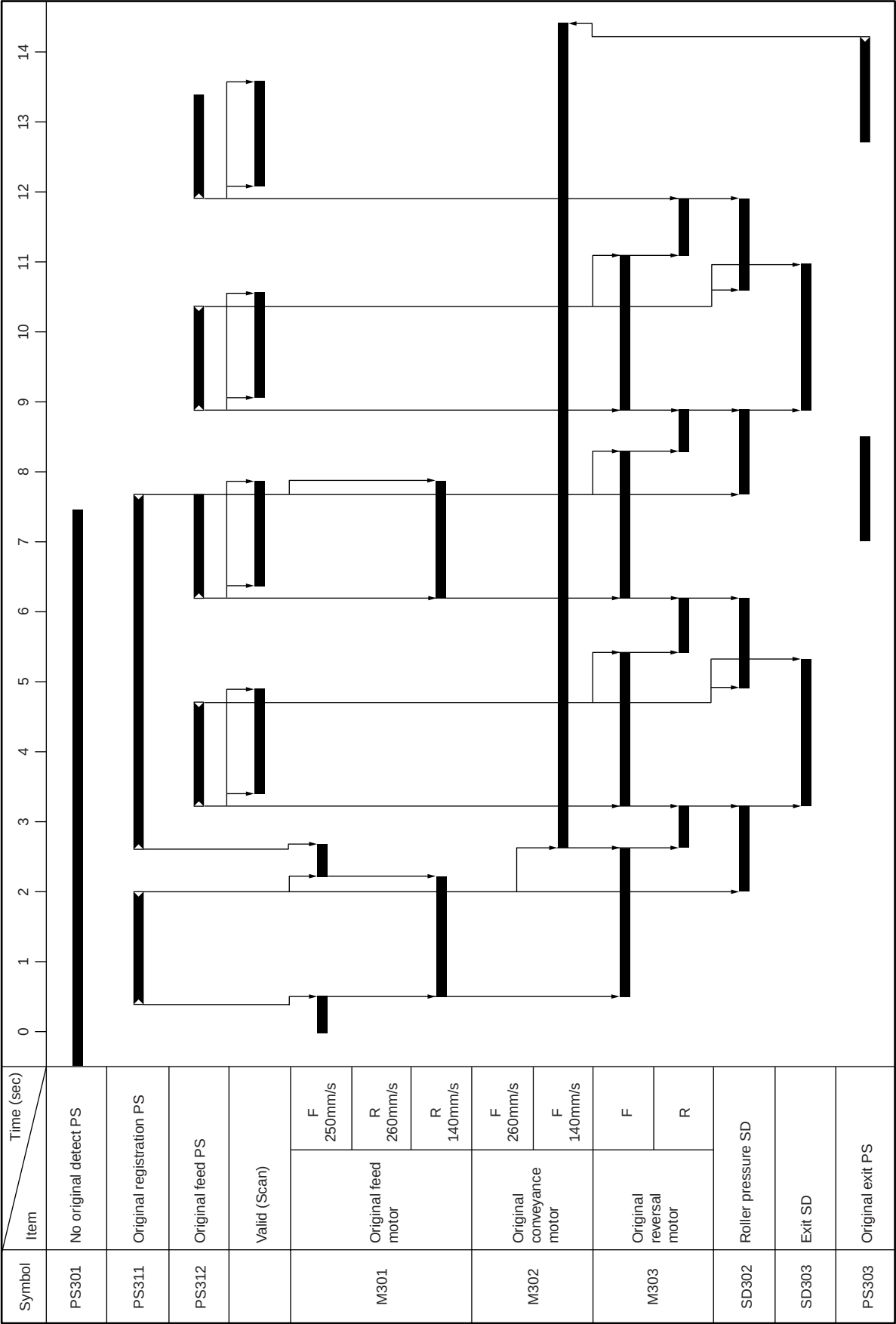
DF-314 CONNECTOR LAYOUT DRAWING



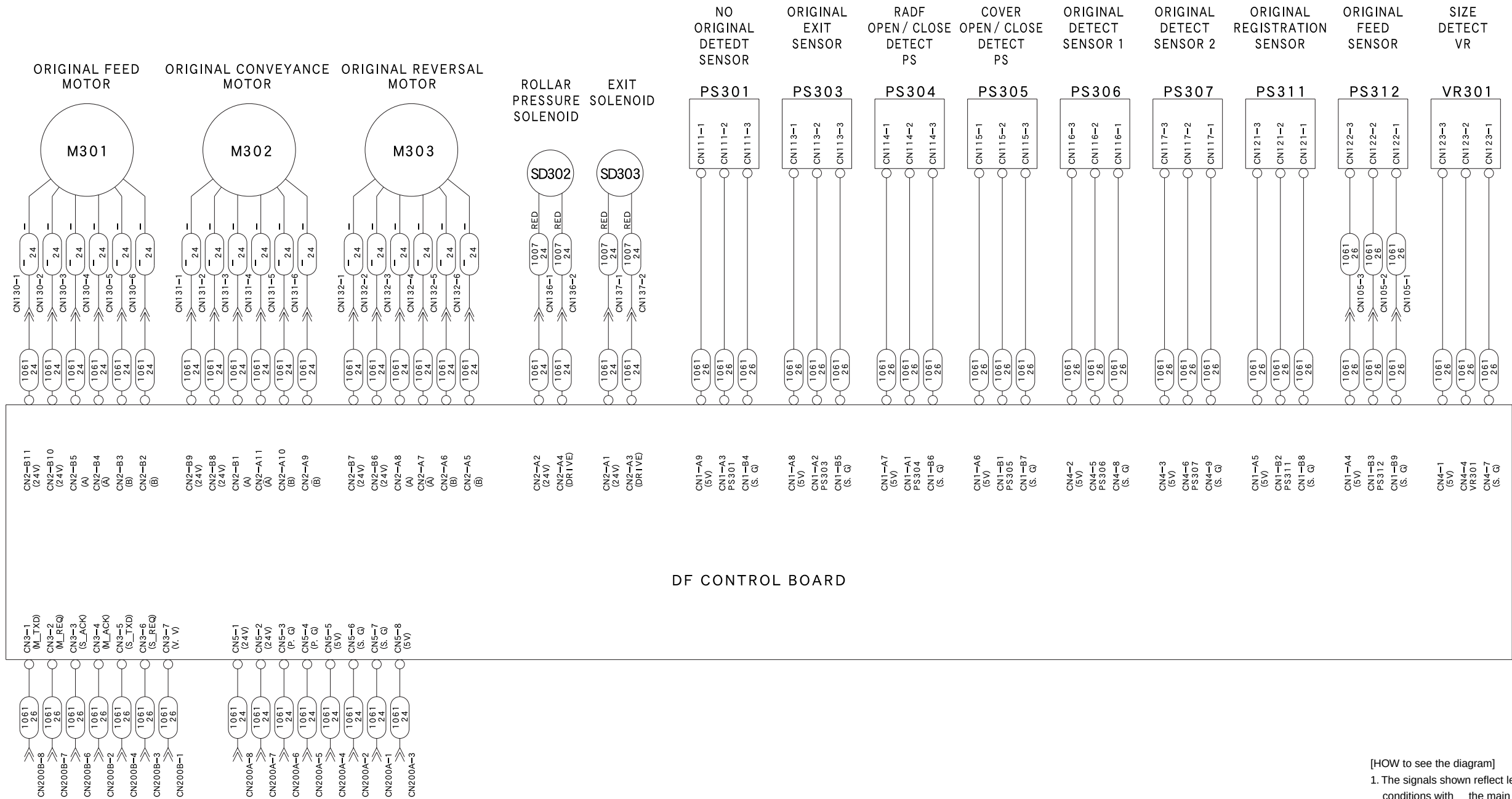
TIME CHART (8.5X11, 1-SIDED ORIGINAL, 3 SHEETS)



TIME CHART (8.5X11, 2-SIDED ORIGINALS, 2 SHEETS)



DF-314 OVERALL WIRING DIAGRAM



[HOW to see the diagram]

1. The signals shown reflect levels present under normal idling conditions with the main switch turned ON.

2. Wiring symbols in the figure are as follows.

1) @-@-@-@ is Connector

2) (R@) @is ribbon cable

3. Signal symbols in the figure are as follows .

[H] High active

[L] Low active

[*] Analog signal

[P] Pulse signal

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Konica

PARTS CATALOG

Model
DF-314

SEPTEMBER 2002
THIRD EDITION

KONICA BUSINESS TECHNOLOGIES, INC.

How to use this catalog

This parts catalog includes illustrations and part numbers for all replacement parts and assemblies used in this model.

Model-specific parts are identified in the illustrations with reference numbers. Use the reference number to locate the corresponding part number on the facing page.

Common hardware items, such as screws, nuts, washers, and pins, are identified in the illustrations with reference letters. Use the reference letter to locate the corresponding part number on the hardware listing in the lower right hand corner of the facing page.

If you know a part number, but don't know where the part is used, use the numerical index to determine the page number and reference number for that part. Because some common parts are used in several places, there may be more than one entry. Refer to the illustrations to see where the part may be used.

If you know a part's description, but don't know where to look to find the part number, use the alphabetical index to determine likely page and reference numbers. Then look at the illustrations to determine that you have identified the correct part. Locate the part number using the listing on the opposite page.

Retail pricing that appears with the numerical index, while valid when this catalog was printed, is subject to change without notice. The prices are only suggested prices and are provided only for reference. Dealers may determine their own selling prices. For up-to-date pricing, refer to current Konica price lists or contact the Konica Parts Distribution Center.

How to order parts

Use standard Konica parts ordering procedures to obtain these parts. For ordering options, contact Konica's Parts Distribution Center.

When ordering parts, be sure to specify part numbers exactly as listed in this catalog.

NOTE: Electrical parts may include previously used components.

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How to use this catalog iii

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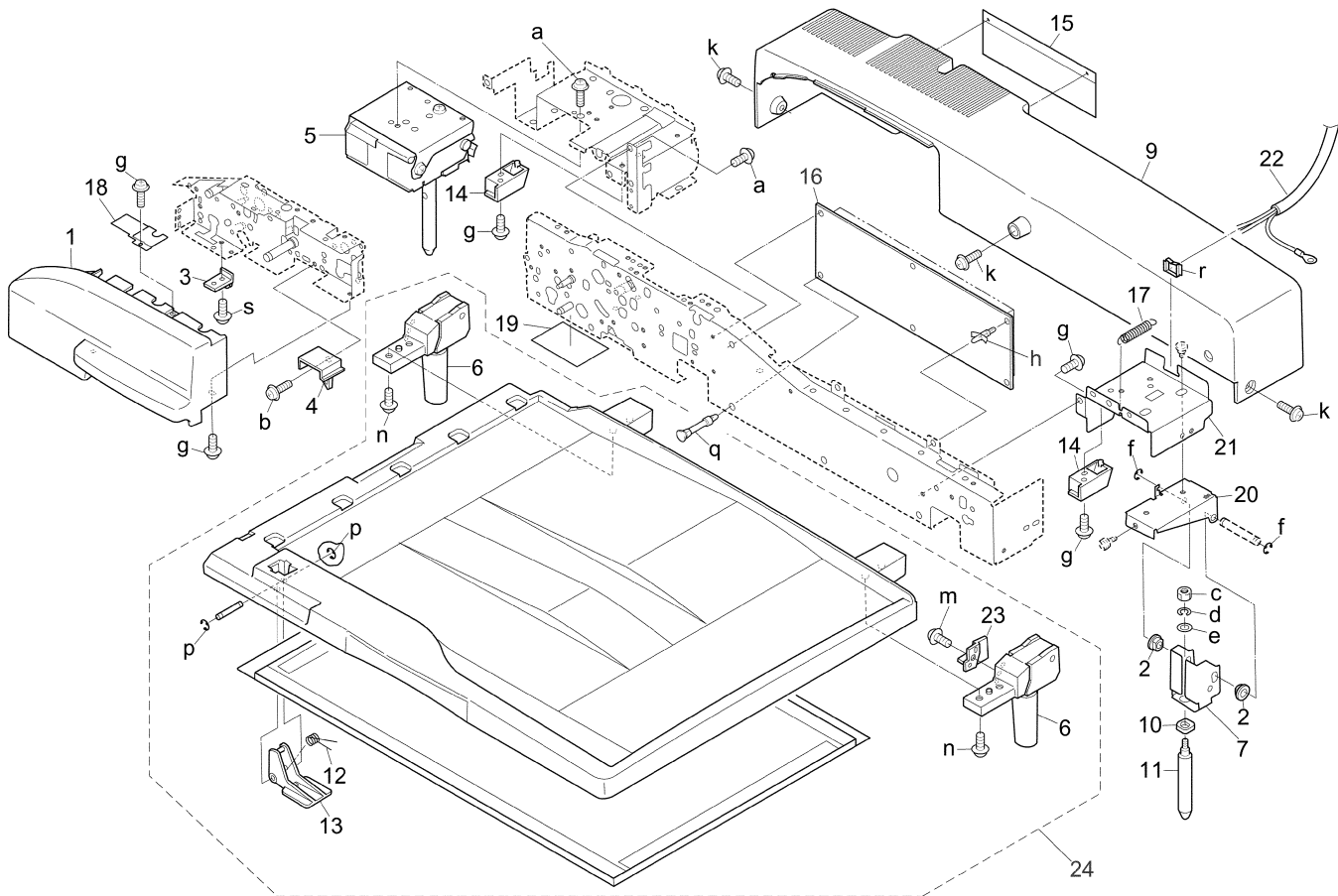
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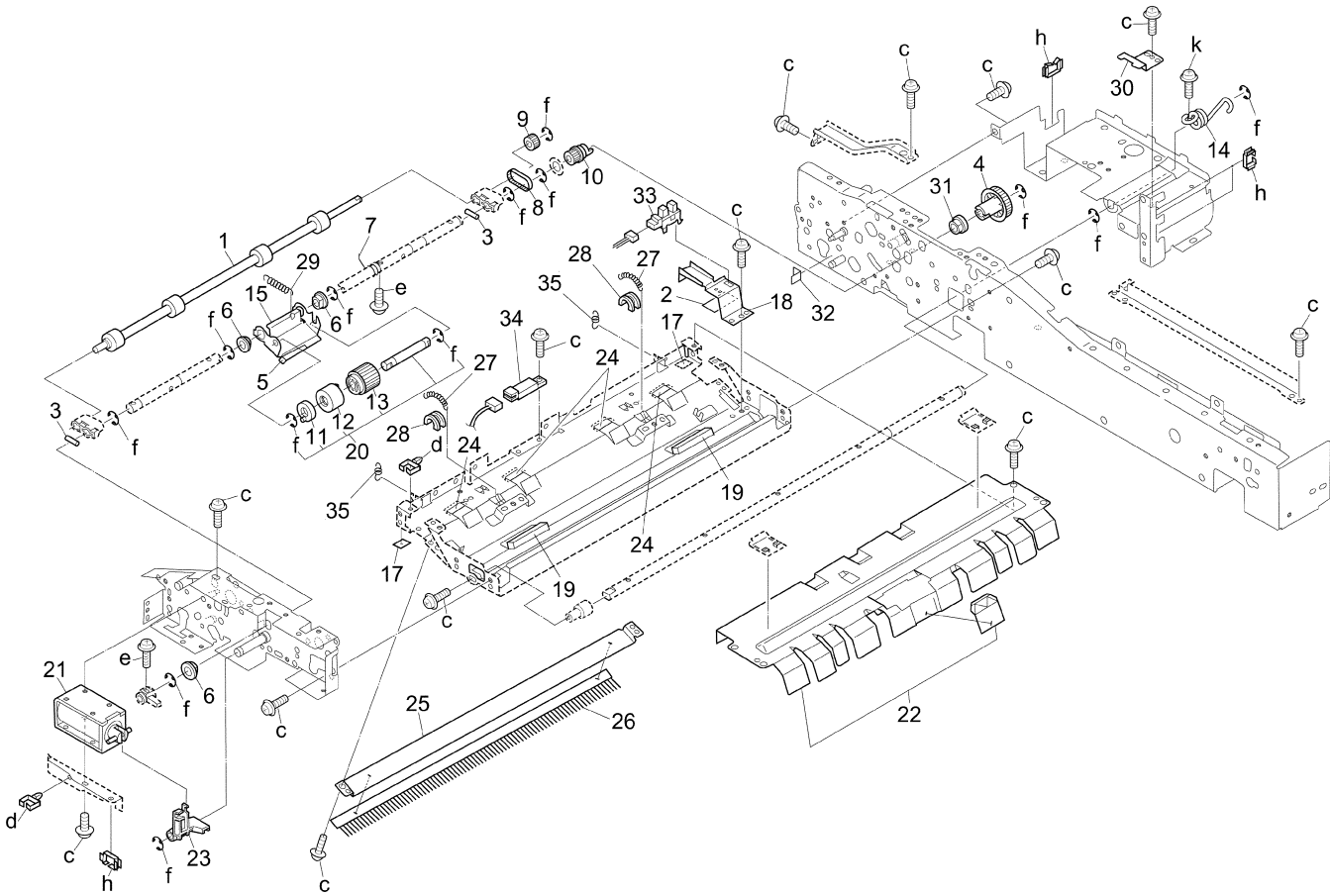
DF-314



REF. NO.	PART NUMBER	DESCRIPTION
1	13GL12030	Front cover
2	13GL76080	Shaft holder/E
3	13GL45600	Positioning stopper/front
4	13GL46160	Lock catch
5	13GL10110	Hinge/L
6	13GL46030	Original cover hinge
7	13GL10210	Hinge bottom plate/R
8	*	Not used
9	13GL12020	Rear cover
10	13GL10150	Hinge auxiliary plate/1
11	13GL10220	Hinge positioning shaft/R
12	13GL46100	Lock spring
13	13GL46080	Lock lever/A
14	13GL10320	Hinge stopper
15	13GL10310	Hinge cover sheet/1
16	13G8-9011	RADF control unit
17	13GL10250	Hold spring/B
18	13GL12050	Front auxiliary cover
19	13GL97081	Cleaning label/1
20	13GL10200	Hinge upper plate/R
21	13GL10191	Hinge mount plate/R
22	13GL90042	RADF wiring/4
23	13GL46710	Hinge plate
24	13GL-4800	Original exit tray assembly

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z184061
b	00Z183041
c	00Z510501
d	00Z620501
e	00Z610501
f	00Z670406
g	00Z193041
h	00Z920034
k	00Z193062
m	00Z253081
n	00Z254101
p	00Z670306
q	00Z925103
r	00Z926251
s	00Z183042

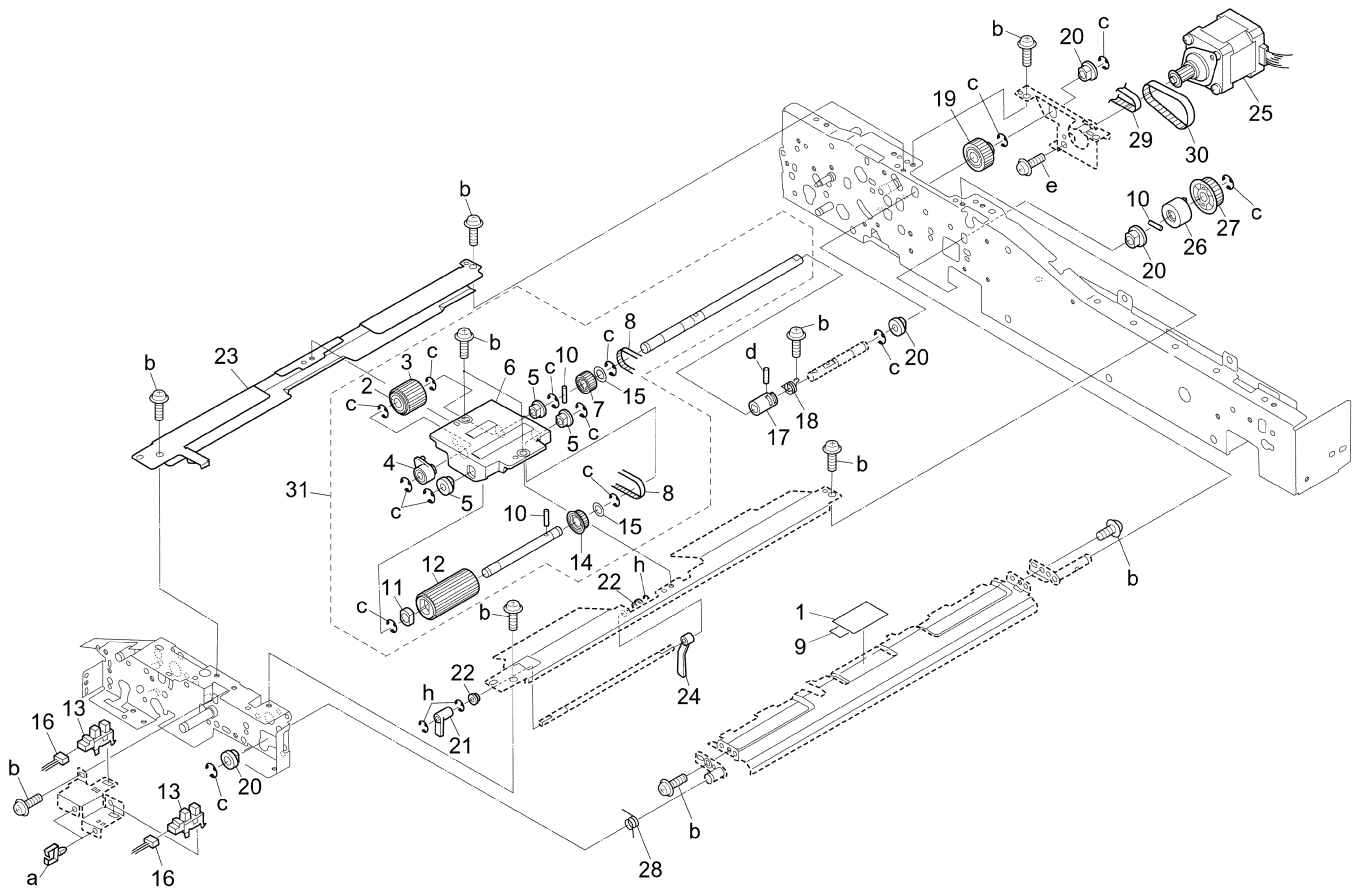
DF-314



REF. NO.	PART NUMBER	DESCRIPTION
1	13GL45151	Driving release roller/A
2	13GL46720	Fixing plate
3	113620600	Pin (A)
4	13GL76590	Conveyance driving pulley/D (Z=42)
5	13GL40500	Slide sheet/A
6	466076020	Paper feeding shaft holder
7	13GL45840	Toque rotary spring
8	13GL77550	Driving reverse belt (L=60/96)
9	13GL76600	Conveyance driving pulley/E (Z=17)
10	13GL76610	Conveyance driving pulley/F (Z=17)
11	13GL40350	Connecting collar
12	13GL40341	Toque limiter/B
13	13GL-4050	Double feed preventive roller/A assembly
14	13GL10300	Rotary spring
15	13GL40050	Double feed preventive plate
16	*	Not used
17	12ER40350	Sticking part
18	13GL46661	Paper exit detecting plate
19	13GL40380	Stopper part/A
20	13GL-4041	Double feed preventive roller
21	13GL82511	Solenoid/A
22	13GL-4012	Paper feed guide plate/lower assembly
23	13GL45210	Driving release lever/1
24	13GL40550	Conveyance auxiliary sheet
25	13GL45240	Conveyance guide plate/B
26	13GL46690	Neutralizing brush
27	13GL45200	Pressure spring
28	13GL45190	Pressure part
29	13GL40240	Double feed preventive spring
30	13GL15212	Wiring cover/2
31	13GL15240	Reversal shaft holder
32	13GL45591	Electrify preventive sheet
33	08AA85510	Photosensor
34	13QA85510	Sensor/1
35	13GL45850	Pressure spring/A

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z183101
c	00Z193041
d	00Z921930
e	00Z193061
f	00Z670406
h	00Z926251
k	00Z194081

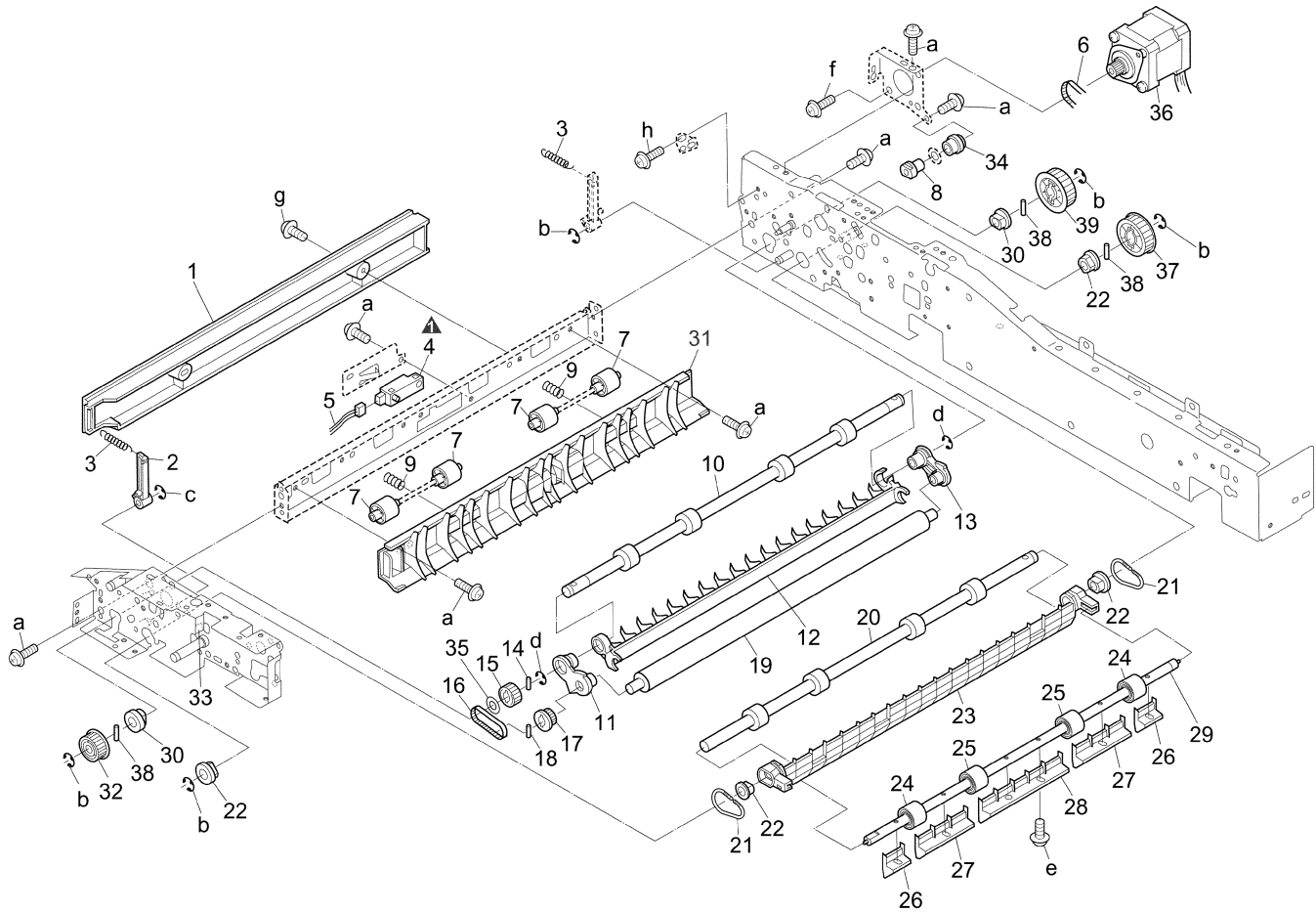
DF-314



REF. NO.	PART NUMBER	DESCRIPTION
1	13GL40250	Original pressure sheet
2	12QV40190	Paper feed roller/B
3	12QV40340	Paper supply rubber
4	13GL76021	Shaft holder/B
5	13GQ76020	Shaft holder/A
6	13GL40060	Paper feed mount part
7	12QV76590	Feeding pulley/A
8	13GL77540	Feeding belt (L=92)
9	13GL40260	Sticking part
10	454078050	Pin
11	13GL76030	Shaft holder/C
12	13GL40110	Paper feed roller/A
13	08AA85510	Photosensor
14	12QV76600	Feeding pulley/B
15	12QV40740	Belt regulating part
16	13GL90012	RADF wiring/1
17	13GL40320	Paper feed coupling/A
18	13GL40330	Paper feed coupling spring
19	13GL76520	Paper feed driving pulley (Z=36)
20	466076020	Paper feeding shaft holder
21	13GL40290	Remained detecting actuator/B
22	13GL76010	Shaft holder/A
23	13GL40070	Paper feed guide plate/B
24	13GL40270	Remained detecting actuator/A
25	13GL-1740	Driving motor/2 assembly
26	13GL40400	Toque limiter/C
27	13GL76660	Original pressure pulley (Z=40)
28	13GL40460	Original pressure spring/A
29	13GL77511	Paper feed belt/A (L=260)
30	13GL77581	Original pressure belt (L=112)
31	13GL-4062	Feeding unit

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z921930
b	00Z193041
c	00Z670406
d	00Z712106
e	00Z183041
h	00Z670206

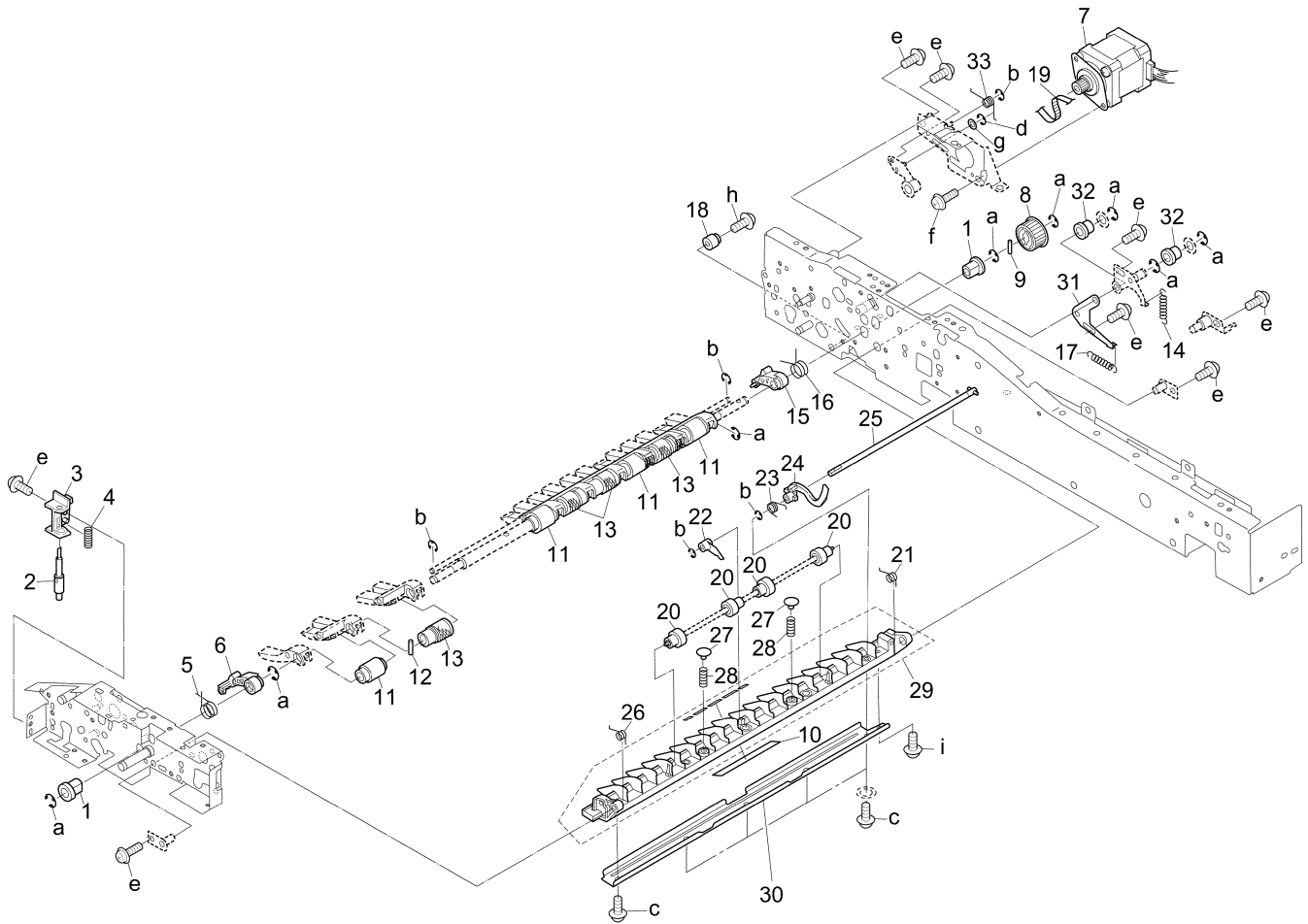
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REF. NO.	PART NUMBER	DESCRIPTION
1	13GL12040	Side cover
2	13GL45620	Adjusting lever/front
3	13GL45570	Adjusting spring/A
4	56AA85520	Conveyance photosensor
5	13GL90031	RADF wiring/3
6	13GL77521	Reading drive belt (L=332)
7	13GL45040	Conveyance driven roller/A
8	13GL15060	Pulley shaft/A
9	13GL45060	Conveyance driven spring/A
10	13GL45031	Conveyance driving roller/A
11	13GL45530	Reading shaft holder/front
12	13GL45510	Reading guide plate
13	13GL45540	Reading shaft holder/Rear
14	466078010	Pin A
15	13GL76640	Reading connect pulley/1 (Z=23)
16	13GL77571	Reading connect belt (L=94)
17	13GL76650	Reading connecting pulley/2 (Z=23)
18	454078050	Pin
19	13GL45521	Reading roller
20	13GL45110	Conveyance driving roller/B
21	13GL45140	Conveyance driven spring/B
22	13GL76040	Shaft holder/F
23	13GL45070	Conveyance guide part/upper
24	13GL45120	Conveyance driven roller/rear
25	13GL45250	Conveyance driven roller/middle
26	13GL45100	Conveyance guide part/3
27	13GL45090	Conveyance guide part/2
28	13GL45080	Conveyance guide part/1
29	13GL45130	Conveyance driven shaft/B
30	13GL75010	Shaft holder/G
31	13GL45011	Conveyance guide part/C
32	13GL76630	Jam handling pulley (Z=34)
33	12ER40350	Sticking part
34	13GL15040	Idler pulley/A
35	25AA48670	Belt hold plate/B
36	13GL-1730	Driving motor/1 assembly
37	13GL76570	Conveyance driving pulley/B (Z=48)
38	113620600	Pin (A)
39	13GL76671	Conveyance driving pulley/G (Z=48)

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193041
b	00Z670406
c	00Z670306
d	00Z670606
e	00Z193061
f	00Z183041
g	00Z193062
h	00Z163061

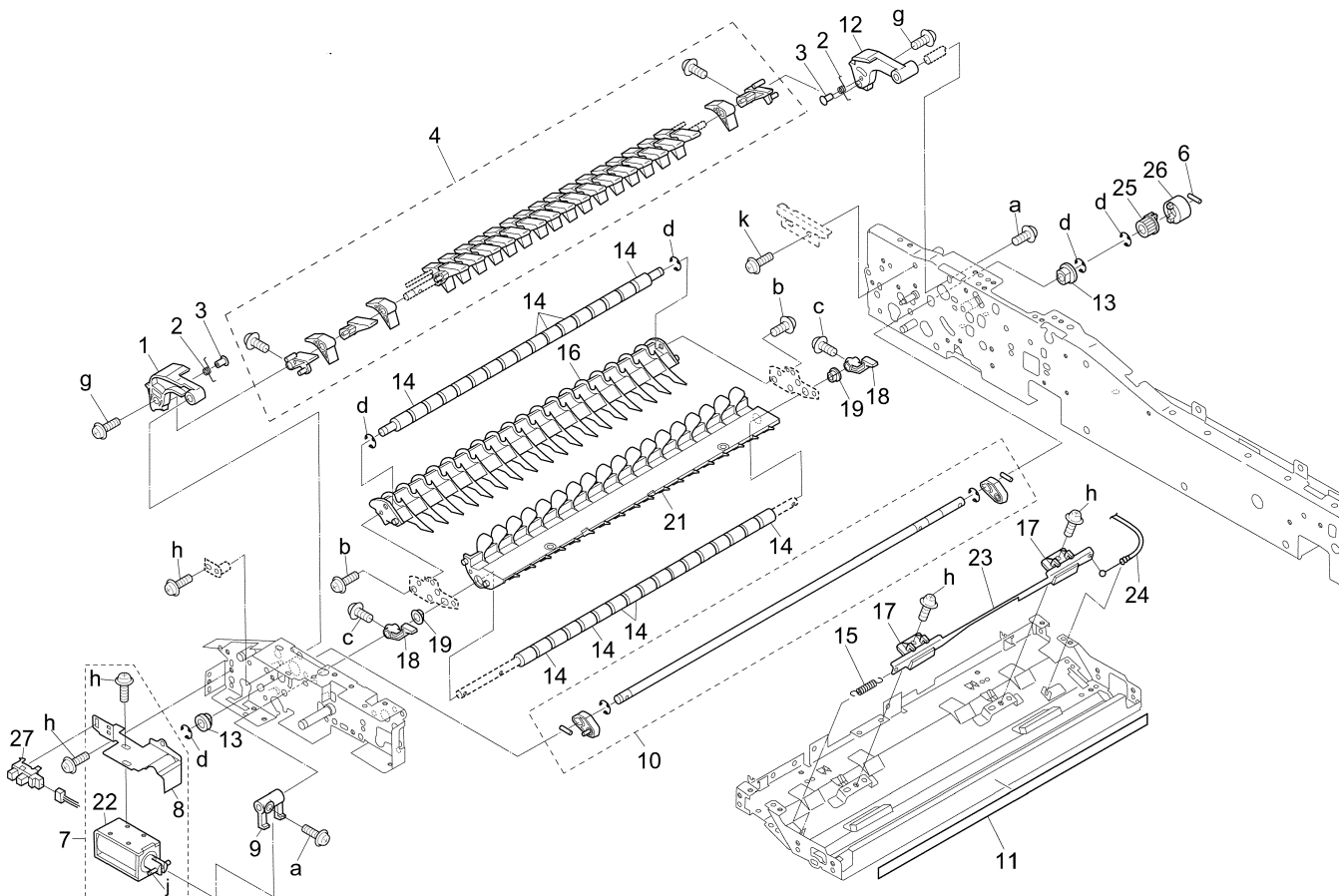
DF-314



REF. NO.	PART NUMBER	DESCRIPTION
1	13GL76060	Shaft holder/D
2	13GL73020	Open-close actuator
3	13GL73010	Open-close part
4	13GL73030	Detecting spring
5	13GL46780	Paper exit guide spring/front
6	13GL-4850	Paper exit guide stopper/A assembly
7	13GL-1750	Driving motor/3assembly
8	13GL76580	Conveyance driving pulley/C (Z=36)
9	113620600	Pin (A)
10	13GL97050	Jam release label
11	13GL45161	Driving release roller/B
12	466078010	Pin A
13	13GL46600	Paper exit driving roller/A
14	13GL15120	Tension spring/B
15	13GL-4860	Paper exit guide stopper/B assembly
16	13GL46750	Paper exit guide spring/rear
17	13GL15030	Tension spring/A
18	13GL46060	Collar/A
19	13GL77531	Conveyance driving belt (L=204)
20	13GL46610	Paper exit driven roller
21	13GL46260	Paper exit pressure spring/rear
22	13GL46640	Paper exit actuator/1
23	13GL46680	Paper exit detecting spring
24	13GL46650	Paper exit actuator/2
25	13GL-4830	Paper exit connecting shaft assembly
26	13GL46250	Paper exit pressure spring/front
27	13GL46700	Spring cover
28	13GL46630	Paper exit driven spring
29	13GL-4870	Paper exit guide plate/A assembly
30	13GL46180	Paper exit reinforcing plate
31	13GL-1570	Tension plate/A assembly
32	13GL15260	Idler pulley/C
33	13GL15190	Tension spring/B

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670406
b	00Z670306
c	00Z253081
d	00Z670206
e	00Z193041
f	00Z183041
g	00Z610301
h	00Z193081
i	00Z252081

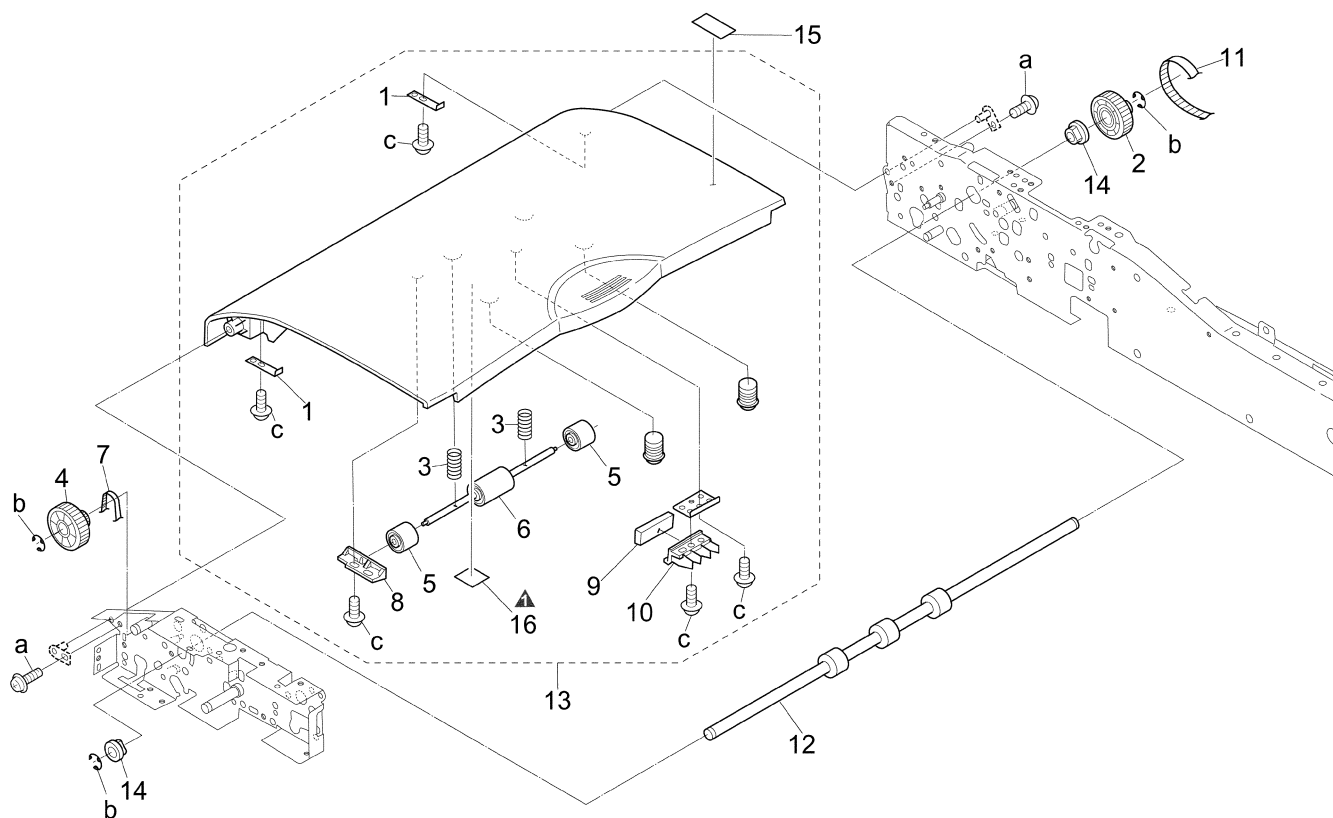
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REF. NO.	PART NUMBER	DESCRIPTION
1	13GL45722	Jam release arm/F
2	13GL45381	Conveyance guide spring
3	13GL45791	Spring fulcrum shaft
4	13GL-4532	Conveyance guide part assembly
5	*	Not used
6	454078050	Pin
7	13GL-1541	Paper exit solenoid assembly
8	13GL46591	Solenoid support plate
9	13GL46550	Paper exit guide lever/A
10	13GL-4581	Conveyance guide cam assembly
11	13GL45630	Conveyance neutralizing sheet/A
12	13GL45732	Jam release arm/R
13	466076020	Paper feeding shaft holder
14	13GL45430	Conveyance driven roller
15	13GL40530	Double feed release spring/A
16	13GL45421	Conveyance guide part/B
17	13GL40490	Support part/A
18	13GL46560	Paper exit guide lever/B
19	13GL76080	Shaft holder/E
21	13GL45411	Conveyance guide part/A
22	25SA82651	Paper exit solenoid
23	13GL40480	Double feed release plate/A
24	13GL40510	Release wire/A
25	13GL76560	Conveyance driving pulley/A (Z=18)
26	13GL15231	Toque limiter/A
27	08AA85510	Photosensor

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193061
b	00Z253081
c	00Z163061
d	00Z670406
g	00Z162061
h	00Z193041
j	00Z163081
k	00Z193041

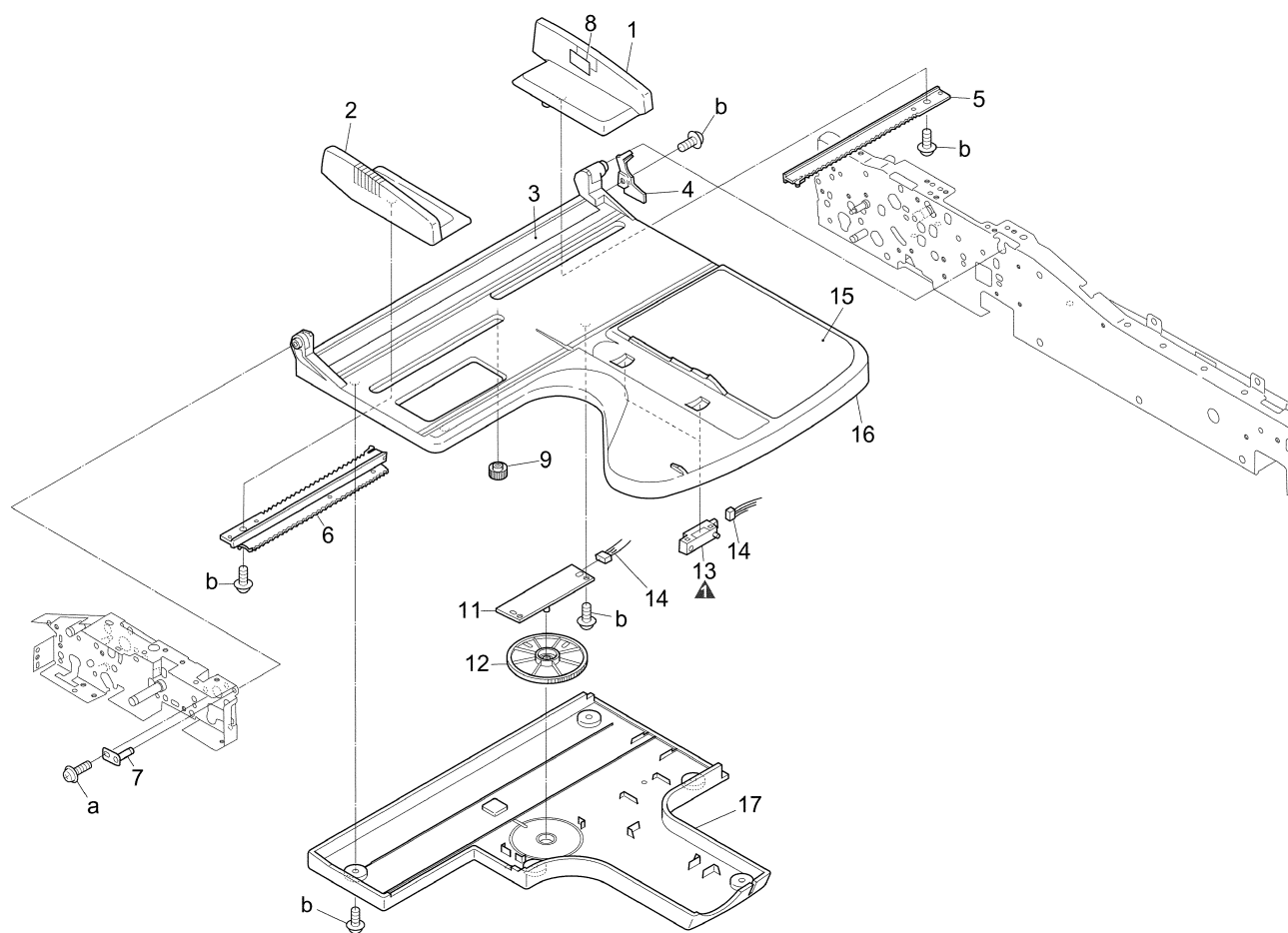
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REF. NO.	PART NUMBER	DESCRIPTION
1	13GL40390	Hold spring/A
2	13GL76510	Registration unit driving puley (Z=48)
3	13GL40160	Registration unit pressure spring
4	13GL76620	Jam handling knob (Z=17)
5	13GL40140	Registration unit driven roller
6	13GL40410	Registration unit driven roller
7	13GL77561	Jam handling belt (L=66)
8	13GL40100	Shaft support part
9	13GL40430	Cleaning part/A
10	13GL40420	Paper feed cleaning part
11	13GL77511	Paper feed belt/A (L=260)
12	13GL40130	Registration unit driving roller
13	13GL-1202	Open-close cover assembly
14	090075530	Bearing
15	55GA97301	Glass cleaning label
16	13QA41430	Sensor support sheet

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193041
b	00Z670606
c	00Z253081

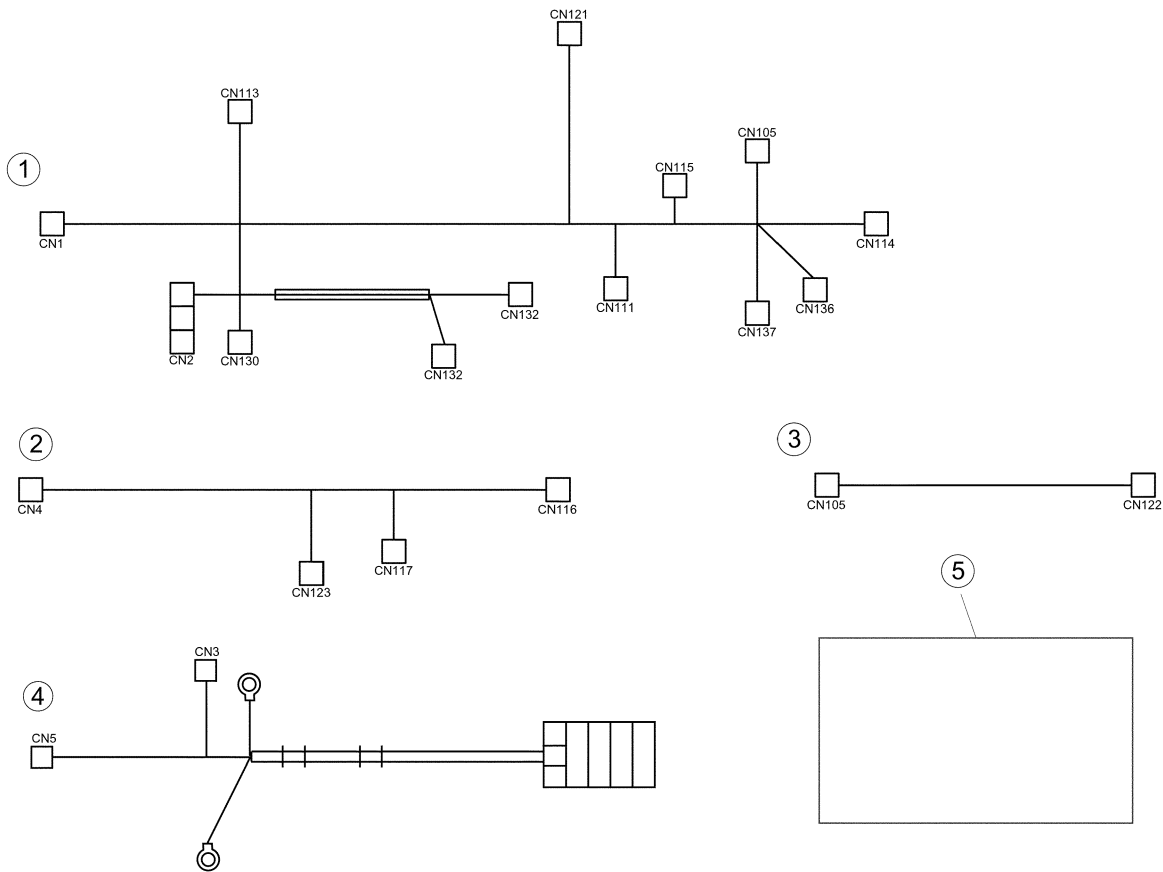
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REF. NO.	PART NUMBER	DESCRIPTION
1	13GL42040	Regulating side plate/rear
2	13GL42030	Regulating side plate/front
3	13GL97030	Paper feed label/A
4	13GL42050	Wiring cover
5	396040611	Rack
6	55GA42210	Rack
7	13GL-1580	Support plate/A assembly
8	13GL97070	Original regulating label/A
9	466077130	Pinion
10	*	Not used
11	13FG-9330	Size detecting board assembly
12	13GL77030	Detecting pinion (Z=124)
13	13QA85520	Sensor/2
14	13GL90021	RADF wiring/2
15	13GL97040	Paper feed label/B
16	13GL42014	Paper feed tray
17	13GL42022	Paper feed cover/lower

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193041
b	00Z253081

Wiring



REF. NO.	PART NUMBER	DESCRIPTION
1	13GL90012	RADF wiring/1
2	13GL90021	RADF wiring/2
3	13GL90031	RADF wiring/3
4	13GL90042	RADF wiring/4
5	13GL97100	Standard sheet

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